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APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/487,526		06/07/1995	JOHN C. HARVEY	5634.355	7792
21967	7590	01/31/2006		EXAMINER	
HUNTON	& WILI	LIAMS LLP	KLIMOWICZ, WILLIAM JOSEPH		
INTELLEC	TUAL PI	ROPERTY DEPAR	RTMENT		
1900 K STREET, N.W.			ART UNIT	PAPER NUMBER	
SUITE 1200				2652	
WASHING	TON, DO	C 20006-1109			

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## BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 08/487,526

Filing Date: June 07, 1995 Appellant(s): HARVEY ET AL.

> Joseph M. Guiliano For Appellant

#### **EXAMINER'S ANSWER**

## (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

## (2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the Examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

U.S. Pat. Nos. 4,965,825, 5,109,414 and 5,335,277 were asserted in the U.S. District Court, Eastern District of Virginia in the case styled *Personalized Mass Media Corp. v. The Weather Channel, Inc. et al.*, Doc. No. 2:95cv242. The case was settled prior to any substantive decision by the Court, although one procedural decision was published at 899 F. supp. 239 (E.D.Va. 1995).

U.S. Pat. No. 5,335,277 was involved in the matter of Certain Digital Satellite System (DDS) Receivers and Components Thereof before the United States International Trade Commission ("Commission"), Investigation No. 337-TA-392. The Administrative Law Judge ("ALJ") issued an "Initial Determination Granting Motion for Summary Determination of Invalidity of Claim 35 of the '277 Patent" on May 16, 1997. This determination was appealed to the U.S. Court of Appeals for the Federal Circuit ("Federal Circuit"), which affirmed the Commission decision in a decision decided January 7, 1999. The ALJ issued "Initial and Recommended Determinations" on October 31, 1997. The Commission adopted certain of the ALJ's findings and took no position on certain other issues in a "Notice Of Final Commission Determination Of No Violation Of Section 337 Of The Tariff Act Of 1930," dated December 4, 1997. This determination was appealed to the Federal Circuit, which affirmed-in-part, reversedin-part, vacated-in-part, and remanded in a decision decided November 24, 1998 published at 161 F.3d 696, 48 U.S.P.Q.2d 1880. On remand, the complainant moved to terminate the investigation. The Commission issued a "Notice Of Commission Decision To Terminate The Investigation And To Vacate Portions Of The Initial Determination" on May 13, 1999.

U.S. Pat. Nos. 4,965,825, 5,109,414 and 5,335,277 were asserted in the U.S. District Court, Northern District of California in the case styled *Personalized Media Communications*,

LLC v. Thomson Consumer Electronics et al., Doc. No. C-96 20957 SW (EAI). The case was stayed during the Commission proceedings and was thereafter voluntarily dismissed by the plaintiffs. The Court issued no substantive decisions.

Each of the issued patents with the exception of Pat. No. 4,704,725 is also asserted in the U.S. District Court, District of Delaware in the case styled *Pegasus Development Corp. v. DIRECTV Inc.*, Doc. No. CA 00-1020 ("Delaware Action"). Special Master Robert L. Harmon has issued a "Report And Recommendation Of Special Master Regarding Claim Construction." The Court has taken no further action in this case as it has been stayed pending the reexamination proceedings discussed below.

Each of the issued patents is asserted in a suit pending in the U.S. District Court,

Northern District of Georgia in the case styled *Personalized Media Communications*, *LLC v*.

Scientific-Atlanta, Inc. et al., Doc. No. 1:02-CV-824 (CAP) ("Atlanta Action"). This suit is proceeding, as it has not been stayed pending the reexamination proceedings.

The Defendants in the Delaware Action and the Atlanta Action have submitted requests for reexamination for each of the issued patents. Each of the reexamination requests have been granted. The pending reexamination proceedings are as follows:

Pat. No. 4,694,490 Control No. 90/006,800,

Pat. No. 4,704,725 Control Nos. 90/006,697 and 90/006,841,

Pat. No. 4,965,825 Control No. 90/006,536,

Pat. No. 5,109,414 Control No. 90/006,838,

Pat. No. 5,233.654 Control Nos. 90/006,606, 90/006,703 and 90/006,839,

Pat. No. 5,335,277 Control Nos. 90/006,563 and 90/006,698, and

Pat. No. 5,887,243 Control No. 90/006,688.

The Office has not yet issued a substantive action in any of these proceedings.

In pending Application No. 08/1 13,329 to which this application claims priority, an appeal was noticed on August 20, 1996, and briefed September 13, 1996. Prosecution was reopened without consideration and the disputed rejection withdrawn in an Office action mailed October 10, 1997.

An appeal was noticed on September 20, 2004, and an appeal brief filed on February 6, 2005 in copending Application No. 08/470,571.

## (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

## (4) Status of Amendments After Final

The Appellants' statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

## (6) Grounds of Rejection to be Reviewed on Appeal

The Appellants' statement of the grounds of rejection to be reviewed on appeal is correct.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

## (8) Evidence Relied Upon and/or Cited

3,008,000	MORCHAND	11-1961
3,245,157	LAVIANA	4-1966
DE 2,904,981	ZABOKLICKI	8-1979
4,413,281	THONNART	11-1983
DE 2,550,624	HAEFNER ET AL.	5-1977
GB 1,486,424	TURNER	9-1977
GB 1,405,141	YOSHINO ET AL.	2-1975
3,982,064	BARNABY	9-1976
JP 56-8975	OKADA ET AL.	1-1981
GB 1,556,366	BETTS	11-1979
JP 52-22423	KOMORI	2-1977
4,018,990	LONG	4-1977
4,218,710	KASHIGI ET AL.	8-1980
DE 2,356,969	DIEDERICH	5-1975
JP 51-126712	KUBOTA ET AL.	11-1976
2,723,307	BARACKET ET AL.	11-1955
4,398,216	FIELD ET AL.	8-1983
JP 55-45248	TSUBOKA ET AL.	3-1980
3,961,137	HUTT ET AL.	6-1976
4,675,737	FUJINO ET AL.	6-1987
4,694,490	HARVEY ET AL.	9-1987

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- Schloss et al. "Controlling Cable Head Ends and Generating Messages by Means of a Micro Computer," (1980) Visions of the 80's, pp. 136-38.
- ii. Chiddix, "Automated Videotape Delay of Satellite Transmissions," satelliteCommunications Magazine, (1978) 2-page re-print.
- iii. Soejima, "A Television Facsimile System," JEE Journal ofElectronic Engineering; vol. 7, No. 48, Nov. 1970, Tokyo, Japan pp. 24-31.
- iv. Robinson, G., and Loveless, W., "Touch-Tone' Teletext--A Combined etext-Viewdata System," IEEE Transactions on Consumer Electronics, vol. CE-25, No. 3, July 1979, pp. 298-303.
- v. Guillermin, J., "Development & Applications of the Antiope-Didon Technology," Videotex, Viewdata, Teletext, 1980.
- vi. "CBS/CCETT North American Broadcast Teletext Specification," (Extended Antiope), May 20, 1981.
- vii. Sechet, C., "Antiope Teletext Captioning" 1980.
- viii. Hedger, J. "Telesoftware: Home Computing Via Broadcast Teletext," Consumer Electronics, pp. 279-287.
- ix. Gunn et al., "A Public Broadcaster's View Of Teletext In The United States."
- x. Aug. 1980. Marti, B., The Concept Of A Universal "Teletext" (broadcast and interactive Videotex) Decoder, Microcomputer Based," Jun. 1979, pp. 1-11.

## (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

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## **SECTION 112 ISSUES:**

E-2) Claims 2-18, 20-30, 33-42, and 67-104 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The following is noted:

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- A) It is true that, in Appellants' 1987 "Wall Street Week" embodiment, an overlay command signal is embedded at a specific time within the transmitted "Wall Street Week" TV program so as to cause a locally generated overlay, at respective receiver stations, to be outputted and overlaid onto the displayed "Wall Street Week" programming at said specific time. It is also true that, to the extent that the occurrence of the embedded overlay command signal is synchronized with "content" of the "Wall Street Week" programming, said overlay command might properly be construed as being *indicative* of TV programming "content". However, as originally disclosed, the receiver station of Appellants' "Wall Street Week" embodiment never actually utilized this synchronized relationship between the command signal and the TV programming content to "determine" anything about the "content" of the TV programming. Namely, by detecting the embedded overlay command signal the receiver stations of Appellants' "Wall Street Week" embodiment, as originally described, only "determined":
  - 1) That the overlay command had been received/detected; and
  - 2) That the locally generated overlay was now to be outputted as a result of this receipt/detection.

That is, the receiver stations made no effort in "determining" actual "content" of the audio/video components of the TV programming based on the detection of the overlay command as appears to be claimed (i.e. according to Appellants' arguments under section 112-1).

B) Specifically, amended claim 2 now recites a method that includes the step of:

"determining content of a second medium received in said plurality of signals" [see line 8 of claim 2]

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In the response filed 1/29/2003 in 08/487,526, Appellants appear to take the position that:

1) The section 112-1 support for the "act of determining" comes from the described "act of detecting" the overlay command signal that is embedded within the VBI of the "Wall Street Week" TV program of the 1987 "Wall Street Week" embodiment; and

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2) That the section 112-1 support for the "content of the second medium" comes from the specific audio/video "content" of the 1987 "Wall Street Week" TV programming to which it is related/synchronized.

As addressed in part "A)" of this paragraph, the Examiner disagrees with Appellants' position that the cited teachings provide adequate support for that which is now recited. Namely, while the receiver stations of Appellants' system were potentially capable of having used the detection of the overlay command signal for "determining content" of the "second medium" in the recited fashion, the instant disclosure as originally filed never described or suggested an embodiment in which this potential capability was ever put to use. That is, nowhere within the originally filed 1987 disclosure was the embedded overlay command signal ever described as having been used for "determining content" of the "Wall Street Week" program as Appellants' arguments, under section 112-1, would now suggest and/or require.

- C) Given the above, it is still unclear as to where the received step of "determining content of a second medium received in said plurality of signals," as recited in the context of claim 2, finds section 112-1 support within the instant disclosure as originally filed. Clarification is required.
- D) The section 112-1 support for the "content" terminology in the context of claims 8-10 and 14-16 is, for similar reasons, not apparent and/or not understood. Clarification is required. Similar clarification regarding support for the "content" terminology is needed as recited in the context of claims 20, 24, 26, 29, 30, 33, 37, 38, 70, 74, 76, 85, and 95.

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E-3) Claim 70-73 (and all claims dependent therefrom) are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Appellants regard as the invention.

1) Claim 70 is directed to an apparatus. However, includes functional language (as in method claims) that is not supported by recitations of corresponding structure. Namely, lines 7-9 of claim 70 include the following recitation:

"wherein, said information based on said second medium is generated based on identifying content of said second medium."

The structure for providing the recited *generation* and structure for proving the recited *identification of content* has not been positively recited as is required of an apparatus claim. Clarification is required.

## **SECTION 102 ISSUES:**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action.

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- E-4) Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by <u>Turner</u> [G.B. #1,486,424].

As is illustrated in figure 5, Turner disclosed a system that comprised:

- 1) Tuning circuitry (not shown) for receiving a plurality of signals;
- 2) Circuitry (@ 41 & 42) for storing information pertaining to a first digital media;
- 3) Circuitry (@ 37) for determining a sync signal "content" of a second video media:

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4) A decoding *computer*, (note that the term *computer*, by definition, refers to nothing more than "a device that computes") made up of elements 16 and 36-47, which coordinates a presentation (i.e., a combine video/text display @ 19) using the stored information and the video component based on the sync signal content that was determined (@ 37); and

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- 5) A display device (@ 19) for outputting the so produced combined medium presentation to the respective user.
- E-5) Claims 3-6 and 11-16 are rejected under 35 U.S.C. 102(b) as being anticipated by <u>Turner</u> [G.B. #1,486,424]. The following is noted:
- 1) With respect to claim 6: All TV transmitter stations are intermediate stations in the sense that they receive TV programming from remote station/studio locations and broadcast it to the receiver station locations.
- 2) With respect to claims 13 -16: Sync signals are inherently "identifiers" of a specific timing content of the TV signal which includes audio and video signal components.
- E-6) Claims 2 is rejected under 35 U.S.C. 102(b) as being anticipated by <u>Yoshino et al.</u> [GB 1,405,141].

Yoshino et al. not only disclosed a television receiver station which operated to simultaneously display on a single CRT (18) locally generated image data provided from an "electronic table computer" and the video signal component of a received television signal,

"The present invention also provides a television receiver on the picture tube of which a television program and the result of the computing process are shown simultaneously"
[lines 11-113 on page 4]

but Yoshino et al. explicitly evidences the fact that those of ordinary skill in the art had understood it to be "advantageous", e.g. as of its 1975 publication date, to have enabled

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locally generated image data from a computer to be superimposed upon displayed TV programming at TV receiving stations.

"As described above there is obtained various advantages such as ... the display of computed information on the picture tube of a television receiver in superposition with the television program" [lines 68-80 on page 4]

As is shown in figure 1, the receiver disclosed by Yoshino et al. comprised:

- a) Circuitry for receiving a plurality of signals including:
  - 1) A TV signal received (@ 56) from an external TV signal source; and
  - 2) Signals (e.g. @ 19-24) that are received from a local "computer" (e.g. @ 78);
- b) Circuitry (@5) which, as is shown in figure 2, includes a "memory circuit" for storing information from the local "computer";
- c) Circuitry (@ 14) for determining a timing "content" of the received TV signal by detecting sync signals contained therein;
- d) A display control *computer* (i.e., a computer is merely a "device that computes") (e.g., @ 8) for coordinating (e.g. synchronizing" the display of the locally generated computer image data with the display of the received TV signal based on the determined timing "content" of the TV signal; and
- e) A display device (e.g. @ 18) for outputting a multimedia presentation comprised of the computer generated image data superimposed over the video component of the received TV signal.

E-7) Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by <u>Zaboklicki</u> [D.E. #2,904,981].

1) Throughout much of the prosecution history, Appellants have tried to have the Zaboklicki prior art removed from consideration by arguing, among other things, that the description provided therein was not enabling. The Examiner disagrees noting that the Zaboklicki disclosure must not be construed in a vacuum. The teachings of Zaboklicki must be considered in light of the knowledge (i.e. the state of the art) that existed at the time of Appellants' alleged invention. In this regard, paragraph "D-3" of this Office action has been provided.

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2) As evidenced via the two translations of record, Zaboklicki disclosed a system for transmitting and displaying interactive TV programming. Each interactive TV program was transmitted to a plurality of receiver stations using one or more TV signal transmissions. That is, some of the interactive TV programs that were transmitted in Zaboklicki utilized only a single TV signal transmission that was conveyed to the receivers over a single tunable TV channel, while others of the interactive TV programs were multi-channeled programs comprised of multiple TV signal transmissions conveyed to the receivers over multiple tunable TV channels. Note that the 1961 publication to Morchand [US #3,008,000] illustrates the fact that such multi-channel interactive TV programming was notoriously well known in the art.

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Each of the TV signal transmissions in <u>Zaboklicki</u> comprised a conventional tunable TV signal that included ones of the following:

- 1) A conventional *primary* video and audio components;
- 2) Additional secondary audio components that, as described in the translations, were to be conveyed in a conventional manner; the "conventional manner" being that used normally to carry secondary multi-lingual audio signals [See, for example, the 1965 U.S. Patent #3,221,098 to Feldman et al].
- 3) Conventional teletext data transmissions, conveyed within the VBI of the TV signal transmissions, which conveyed:
  - A) "Pages" of display code which were used at the receivers to "locally generate" displayable teletext images; and
  - B) Computer software, i.e., "Telesoftware", that was used to program the CPUs of the receivers with the appropriate control programs; wherein Teletext transmissions that included "Telesoftware" were notoriously well known to those of ordinary skill in the art [See, for example, the 1980 publication "Broadcast Telesoftware: Experience with ORACLE" by Hedger, and the 1980 publication "Telesoftware- Value Added Teletext" by Hedger et al]; and
- 4) Program fragment/segment identification information.

At each receiver location, a CPU located therein operated under control of the downloaded Telesoftware to receive various inputs (e.g. initial user data, the program

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fragment/segment identifiers, user responses, etc,...) and in response thereto create an interactive multimedia presentation by:

- 1) Selectively tuning the TV receiver to sequentially receive and display one or ones of the multi-channel TV signal transmissions; and to
- 2) Selectively combine with the display thereof:
  - A) One or ones of the secondary audio components;
  - B) One or ones of the locally generated teletext images; and
  - C) One or ones of locally stored and or locally generated video/audio signal components; and
  - D) Outputted print data.

\*

As to the claim limitations:

## I. A first reading/interpretation of the Zaboklicki prior art:

As is shown in figure 3, <u>Zaboklicki</u> disclosed a receiver station for interactively outputting a multimedia presentation. The station comprised:

- 1) A TV receiver (54) for receiving a plurality of TV signal transmissions that include:
  - a) Primary video and audio TV signal components;
  - b) Secondary/additional audio signal components;
  - c) Teletext signal components including:
    - 1. Pages of display data; and
    - 2. Telesoftware;

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- 2) A memory (7) for storing information of a first media [for storing "Telesoftware"];
- 3) A teletext decoder (@ 56) for determining "content" of other media [ i.e. for detecting the page number content of the teletext media; for detecting the control signal content of the teletext media, for detecting program segment/fragment identifier content of the primary and secondary video/audio components, etc, ...]
- 4) A computer (e.g. including "CPU" 6) which, under control of the stored "telesoftware" coordinates a presentation of the teletext page data and secondary audio components with the presentation of primary video/audio TV signal components; and
- 5) A display device (@ 54) for outputting the coordinated presentation.

## II. A second alternative interpretation of the Zaboklicki prior art:

As is shown in figure 3, <u>Zaboklicki</u> disclosed a receiver station for interactively outputting a multimedia presentation. The station comprised:

- 1) A TV receiver (54) for receiving a plurality of TV signal transmissions that include:
  - a) Primary video and audio TV signal components;
  - b) Secondary/additional audio signal components;
  - c) Teletext signal components including:
    - 1. Pages of display data; and
    - 2. Telesoftware;
- 2) A memory (44) for storing information of a first media [for storing selected pages of teletext data];
- 3) A teletext decoder (@ 56) for determining "content" of other media [ i.e. for detecting a "telesoftware" content of the program segments/fragments; for detecting program segment/fragment identifier content of the primary and secondary video/audio components, etc, ...]

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4) A computer (e.g. including elements 6, 7, and 49) for coordinating, under control of "telesoftware", the presentation of the stored teletext page data and secondary audio components with the presentation of primary video/audio TV signal components; and

5) A display device (@ 54) for outputting the coordinated presentation.

E-8) Claim 3-18 are rejected under 35 U.S.C. 102(b) as being anticipated by <u>Zaboklicki</u> [D.E. #2,904,981] for the reasons that were set forth for claim 2 above. Additionally, the following is noted:

## 1) With respect to claims 3 and 4:

- a) With respect to the first reading/interpretation, note that the telesoftware is stored in the RAM (7) of the CPU (6);
- b) With respect to the second interpretation, it is noted that the terms computer refers to "a device that computes". Therefor, element (56) also falls within a fair reading of "computer".

## 2) With respect to claims 6:

a) All TV stations are "intermediate station" because they are located between/intermediate local and remote program feeds/suppliers and the receiver station locations. Local TV stations (and CATV headends) also constitute "intermediate transmitted stations" being that they receive and rebroadcast TV signals that are transmitted to them from other network station locations.

#### 3) With respect to claims 8-10 and 13-16:

- a) The Examiner notes that, based on the detection of program segment/fragment identifier "content" at (56), CPU (6) generates channel switching signals (@ 27) which are provided to receiver
- (54) to control a tuner therein to select new TV signal transmissions comprises primary and secondary video and audio signal content. At least the secondary audio signal content includes "explanations".

## 4) With respect to claims 11 and 12:

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a) "TELEXT" data is provided, inherently, via digital data channel.

## 5) With respect to claims 17 and 18:

a) The receiver includes circuitry for storing at least three types of received media (e.g. @, 7, 44, and/or 50).

E-9) Claims 20 is rejected under 35 U.S.C. 102(b) as being anticipated by <u>Zaboklicki</u> [D.E. #2,904,981] for the reasons that were set forth for claims 3-18 above. Additionally, the following is noted:

To create its "coordinated" multi-media presentation, each receiver necessarily received the described segment/fragment "identification information" pertaining to a "content" of all multi-channel transmissions, and the additional components therein, that were selected and displayed as part of its multimedia presentation [e.g. each receiver must have at least known that the "content" contain therein belonged to the specific interactive TV program that was being displayed].

That is, inherently, a "content" of each multi-channel transmission must have been be determined/"identified" by each receiver station before it was tuned and received [e.g. the receiver must know that the "content" contained therein belongs to the interactive TV program currently being displayed/presented];

- E-10) Claims 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Zaboklicki [D.E. #2,904,981] for the reasons that were set forth for claim 20 above.
- E-11) Claims 26, 27, 37-42, 67-69, and 82-84 are rejected under 35 U.S.C. 102(b) as being anticipated by <u>Zaboklicki</u> [D.E. #2,904,981] for the reasons that were set forth for claim 20 above.
- E-12) Claim 33 is rejected under 35 U.S.C. 102(b) as being anticipated by Morchand [U.S. Patent #3,008,000].

As is shown in figure 1, <u>Morchand</u> disclosed a system for presenting a multimedia TV presentation; i.e. a TV presentation comprising a video "media" component and an audio "media" component. The system comprised:

a) Tuner circuitry (@ 18a and 18b) for receiving a first multimedia TV signal from a first one of the illustrated transmitter stations;

- b) Circuitry for outputting the first multimedia TV signal to a plurality of output device (@ 22 and 42);
- c) An input device (@ 28) for receiving user inputs based on the outputted/displayed first signal;
- d) Control logic (@ 26, 28, and 30) for "comparing" said user response to information, e.g. to the pattern of light impulses detected @ 40a-40n, that corresponds to "content" of the first signal [i.e. the pattern of light corresponds to a limited number of answers that can be selected by the user in response to a question asked of the user via the first signal, wherein the logic circuit effects a comparison between the user response and the displayed pattern to determine which answer has been selected (note lines 26-49 of column 3)];
- e) Said tuner circuitry (@ 18a and 18b) for tuning the receiver station to receive a second multimedia TV signal from a second one of the illustrated TV signal transmitters;
- f) Circuitry for outputting the audio and video information that corresponds to the second signal; wherein the resulting multimedia TV signal presentation comprises audio and video information from both received TV signals.

## **SECTION 103 ISSUES:**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were

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made absent any evidence to the contrary. Appellants are advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

E-13) Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnaby [US #3,982,064] in view of Okada et al. [JP 56-8975].

## I. The showing of Barnaby:

Barnaby discloses a TV transmission system. The system includes the transmitter station circuitry that is shown in figure 2, and the receiver station circuitry that is shown in figure 1. The following is noted:

- 1) As is evidenced in figure 2, the transmitter station circuitry of <u>Barnaby</u> comprised:
  - a) A "source" of TV programming (not shown in the figure) which provides the video component of the TV program signal ("VIDEO"); and
  - b) A "source" of teletext data (e.g. 100, 102, 104, 106, 110, 112, and 114), that is different from the source of TV programming, for providing teletext data ("DATA").

The teletext data from the second named source was embedded in the VBI of the video from the first named source to create a combined signal ("OUTPUT DATA AND VIDEO") for transmission to the receiver stations.

- 2) As evidenced in figure 1, the receiver station circuitry of <u>Barnaby</u> comprised:
  - a) A storage device (14) for storing "first information" representing a received teletext page address;
  - b) An input device (22) for inputting "second information" representing a desired teletext page address;

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c) Comparing circuitry (21) for comparing said "first information" stored at the receiving station (@14) with said "second information" to determine whether to generate and present a "second medium" comprised of a locally generated teletext text/graphic image (@ the output of 35), wherein said generation and presentation of the second medium occurs based on the selective receipt of the "third information" comprising the teletext page instruction set that is associated with said "first information" and is stored @ 26;

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- d) Switching circuitry (2) for coordinating the display of the video component of the received TV programming with the display of the locally generated teletext based on said "determination"; and
- e) An output device (4) for displaying the coordinated first and second mediums

#### II. Differences:

Claim 24 differs from the showing of Barnaby only in that:

- a) Barnaby does not state that the page number input (@ 22) "corresponds to content" of the received TV programming; and
- b) Barnaby only illustrates a single output/display device (@ 4) and does not show/suggest separate display/output devices for the first and second mediums.

#### III. Obviousness:

The following is noted:

- a) The Examiner takes Official Notice that it was notoriously well known to those of ordinary skill in the art at the time of Appellants' alleged invention for the user entered page numbers to have pertained to "program-related" teletext pages and, therefor, for the entered page numbers to have "corresponded to content" of the received TV programming, e.g., note: lines 12-20 of the second column on page 30 of the 1976 article "Oracle on Independent Television" by Green et al.; lines 2-7 on page 26 of WO 81/02961 to Campbell et al.; etc,... The Examiner maintains that it would have been obvious to one of ordinary skill in the art for the receiver described in Barnaby to have been utilized for the notoriously wellknown and conventional purpose of displaying "program related" teletext pages.
- b) As is evidenced by figures 2 and 3 of Okada et al., it was known and desirable to those of ordinary skill in the art at the time of Appellants' alleged invention to have added appropriate selection and switching circuitry (e.g. 30, 31, 32, 40) to conventional teletext receiving stations to enable users to selectively output

received teletext images to a separate output printing devices (@ 33) in order to obtain hardcopies thereof. Given this showing, it would have been obvious to one of ordinary skill in the art to have modified the conventional teletext receiver described by <u>Barnaby</u> to provide this conventional desirable feature.

E-14) Claims 74 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnaby [US #3,982,064] in view of Okada et al. [JP 56-8975], for the same reasons that were set forth for claims 24 and 25 above, in view of Betts [GB 1,556,366].

- 1) Claims 74 and 75 differ from the system disclosed by Barnaby, modified by Okada et al., only in that the Teletext decoding circuitry of the modified system was implemented using dedicated logic circuitry rather than in software using a microcomputer.
- 2) <u>Betts</u> evidences the fact that such software implementations of conventional teletext decoder circuitry was known to have had significant advantages over the dedicated logic approach [e.g. lines 50-55 and 70-74 on page 1].
- 3) The Examiner maintains that it would have been obvious to one of ordinary skill in the art to have utilized a software driven decoder to provide the processing of the dedicated circuitry in the modified system of Barnaby given the known advantages provided thereby (as evidenced by Betts).

E-15) Claims 103 and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnaby [US #3,982,064] in view of Okada et al. [JP 56-8975] for the same reason that is set forth for claims 74 and 75 above. Further, the following is noted

Multi-channel cable TV systems began (and continue) to be used to convey conventional TV broadcast signals to household receiving locations that are unable to receive the broadcasted TV signals directly (due to distance and/or environment). Thus, utilizing a multi-channel cable system to convey conventional broadcast TV signals of the type described by <u>Barnaby</u> and <u>Okada et al.</u> would have been obvious given that such simply represents a utilization for which cable was intended. Note, for example, WO/02961 to Campbell et al.

E-16) Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komori [JP 52-22423] and Long et al. [US #4,018,990].

#### I. The showing of Komori:

As is shown on the cover page, Komori disclosed a video signal processing device which:

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- a) Received a first information signal (V1) representing a first analog video signal medium;
- b) Received a second information signal (V2) representing a second binary video signal medium;
- c) Identified (@ 11) a sync signal "content" of the analog video signal media;
- d) Identified (@ 13) a sync signal "content" of the binary video signal media;
- e) Stored information (@ 17) based on the second binary video signal media; and
- f) Outputting (@20) a signal (V3) representing a multimedia presentation comprised of selected portions of analog video information and selected portions of the binary video signal information. [see figure 4]

The claims differ from the showing of <u>Komori</u> only in that <u>Komori</u> does not explicitly illustrate at least one of the signals V1 and V2 as having been provided from a remote transmitter source.

#### II. The showing of Long et al.:

As is shown in figures 1 and 15, <u>Long et al.</u> disclosed a video signal processing device which:

- a) Received a first information signal ("LOCAL" of figure 15) representing a first video signal medium;
- b) Received a second information signal ("REMOTE" of figure 15) representing a second video signal medium, wherein this second information signal is provided from a remote signal transmission source (not shown);
- c) Identified (@ "16" of figure 1) a sync signal "content" of the first video signal media;
- d) Identified (@ "14" of figure 1) a sync signal "content" of the second video signal media;
- e) Stored information (@ "15" of figure 1) based on the second video signal media; and

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f) Outputting (@ "14" of figure 15) a signal ("VIDEO OUTPUT") representing a combined presentation comprised of selected portions of the first video signal

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The claims differ from the showing of <u>Long et al.</u> only in that <u>Long et al.</u> does not explicitly describe an application of the illustrated system in which the first and second video signals represent different "media."

information and selected portions of the second video signal medium.

## **III. Obviousness:**

- A) Given the showing of <u>Long et al.</u>, one of ordinary skill in the art would have recognized the obviousness of having provided at least one of the video signals V1/V2 in <u>Komori</u> from a remote transmission station location.
- B) Alternatively, given the showing of <u>Komori</u>, one of ordinary skill in the art would have recognized the obviousness of having utilized the system of <u>Long et al.</u> to have combined two video signals of different "media".
- E-17) Claim 82 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Komori</u> [JP 52-22423] and <u>Long et al.</u> [US #4,081,990] for the same reason as explained for claims 26 and 27 above.

One of ordinary skill in the art would have understood the fact that the respective video signals included an audio component processed therewith in a like manner.

E-18) Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashigi et al. [US patent # 4,218,710] in view of Komori [JP 52-22423] and Long et al. [US #4,081,990].

#### I. The showing of Kashigi:

As is shown in figure 1, Kashigi et al. disclosed a processing system for combining multiple received non-synchronous video signals (e.g. @ 11 and 12) into a single combined video signal output (@14). The system:

a) Received a first information signal (@ 11) representing a first video signal medium;

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- b) Received a second information signal (@ 12) representing a second video signal medium;
- c) Identified (@ "21", "24", and "25" of the "1st FRAME synchronizer" @ "16") a sync signal "content" of the first video signal media;
- d) Identified (i.e. @ "21", "24", and "25" of the "2nd FRAME synchronizer" @ "17") a sync signal "content" of the second video signal media;
- e) Stored information (@ "30" of the "1st FRAME synchronizer" @ "16") based on the first video signal media;
- f) Stored information (i.e. @ "30" of the "2nd FRAME synchronizer" @ "17") based on the second video signal media; and
- g) Outputting (@ "14") a signal ("VIDEO OUTPUT") representing a combined presentation comprised of selected portions of the first video signal information and selected portions of the second video signal medium.

## **II. Differences:**

The claims differ from the showing of <u>Kashigi et al.</u> only in that <u>Kashigi et al.</u> did not explicitly describe or show:

- 1) That at least one of the video signal inputs (@ 11/12) was provided from a remote transmission signal source; and
- 2) That the video signal inputs (@ 11/12) represented different video signal "media".

#### III. Obviousness:

The applied prior art of <u>Long et al.</u> and <u>Komori</u> have been described above. The following is noted:

- 1) Given the showing of <u>Long et al.</u>, one of ordinary skill in the art would have recognized the obviousness of having provided at least one of the video signals (@ 11/12) in <u>Kashigi et al.</u> from a remote transmission station location; and
- 2) Given the showing of <u>Komori</u>, one of ordinary skill in the art would have also recognized the obviousness of having utilized the modified system of <u>Kashigi et al.</u> to have combined two video signals of different "media".

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E-19) Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over

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any one of:

A) Marsden [GB 871,238];

B) Germany [GB 959,274]; and

C) <u>Diederich</u> [DE 2,356,969],

in view of the 1980 publication "Controlling Cable Head Ends and Generating Messages

by Means of a Micro Computer" by Schloss et al.

I. The automated insertion of advertising at local TV stations:

The Examiner maintains that it was notoriously well known in the art for central/network

TV stations to have embedded one or more "instruction signals" into their broadcasted

network TV programming transmission in order to have automated the process of

inserting local/regional advertising into the network TV programming at local/regional

TV station location prior to re-transmission therefrom. That is, the embedded

"instruction signal" identified those portions/"content" of the network TV programming

that was to be replaced, at the local/regional stations, by local/regional advertising. Such

conventional "automated" system technology is illustrated by any one of Marsden

Germany, and Diedrich.

In the automated system discussed above, the local/regional TV stations correspond to

the recited "receiving station" in that the local/regional TV stations of the automated

system necessarily comprised:

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- 1) Circuitry for receiving and decoding the "instruction signal" that are embedded within the received network TV programming to "identify content" of the network TV programming; i.e. to identify portions/segments of the network TV programming that are to be replaced with local/regional advertising;
- 2) Circuitry that, in response to said identified content, "causes at least one video image of a series of discrete video images to be outputted from a local/regional advertising TV program source subsequent to the content identification process"; and
- 3) Combining/switching circuitry for sequentially combining the at least one video image that is outputted from the local/regional program source with and received network TV programming to create a combined TV signal presentation which is inherently "multimedia" by its very nature; i.e. such TV signals inherently comprised audio and video media components.

#### II. Differences:

Claim 29 differs from the automated system discussed above only on that the automated system discussed above did not necessarily generate the series of discrete images that comprised the local/regional TV advertising by "processing a command signal that causes the execution of processor instructions to create" said series of images.

## III. The showing of Schloss et al.:

- A) The publication by Schloss et al. has been cited as evidencing the fact that:
  - 1) It was conventional for TV stations to have been controlled by a computer whereby the computer was programmed with program event file (i.e. a "control signal") that, when processed by the computer", caused the execution of software (i.e. "processor instructions") to create, at the video output of the computer, a series computer generated message and advertising video frames; and
  - 2) That the computer included its own receiver (i.e. a the "modems") for receiving information from remote sources (i.e. from advertisers).

That is, Schloss et al. explicitly taught the following:

"The purpose of this project was to program an Apple Micro-Computer to perform the following functions in Omega's cable system in Brazil, Indiana.

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- 1. Channel Switching;
- 2. Character Generation;
- 3. Perpetual clock and calendar.

The clock calendar function and the keyboard command function interact with the computer to produce output voltages. These voltages switch coaxial switches to perform the above functions. Audio switching is similarly performed with the computer output voltages. The video output of the computer is used as a character generation and is routed to the switcher as an input. Upon command the computer will play messages and/or advertisements which the switcher will route to an output channel. At a cost of less than \$3500 complete, the Apple II computer and switcher is an economical controller and character generator" [lines 2-22 in the first column on page 136 of the publication]

"A modern cable television system has a need to control multiple inputs (normally television signals) into a limited number of cable television channels. The system needs to control these signals by time of day, day of week, and day of the month" [lines 25-30 in the first column on page 136 of the publication]

"Utilizing an Apple II micro computer and custom switcher, the computer will control three audio and video inputs into one output channel and any three audio and video inputs into a second output channel. One of these video inputs can be the video output of the computer which we have utilized as a message and advertising input to our two channels" [lines 37-44 in the first column on page 136 of the publication]

"The operating program, messages, and event file of times of channel changes are stored on the disk and loaded into the computer when needed" [lines 3-6 in the second column on page 136 of the publication]

"Any video and audio sources could be [substituted] for those listed above and extra relays could be wired in parallel with the coaxial relays. For example, the computer could energize a remote controlled audio cart player or video player whenever it's video output was selected by the computer" [lines 3-9 in the first column on page 137 of the publication]

"The computer program was written by John Turpin of Home Computer Center in Indianapolis, consists basically of three parts:

- 1. A message entry program to input messages and store them of disk.
- 2. An event entry program to input times and dates of events and store these in chronological order on the disk.

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3. An event handling program to compare the time from the real time clock with the times in the event file and carry out the specified events as necessary."

[lines 13-24 in the first column on page 137 of the publication]

"The most important strength of the controller is that the system is 'software' controlled rather than 'hardware' controlled. Any system changes and additions require only additional programming." [lines 22-26 in the second column on page 137 of the publication]

"Through the use of telephone interconnection devices (modems), the computer at the head end can be remotely programmed. The cable TV office could change the event file without going to the head end. Similarly, any advertiser could access the computer and change his advertisement on a daily or hourly basis" [lines 4-11 on page 138 of the publication]

## IV. Obviousness:

The Examiner maintains that it would have been obvious to one of ordinary skill in the art to have modified the local/regional TV stations in any one of Marsden, Germany, and Diederich, to have included the "computer" implemented station "controller" that was described in Schloss et al. given the many strengths and advantages provided thereby.

"The most important strength of the controller is that the system is 'software' controlled rather than 'hardware' controlled. Any system changes and additions require only additional programming."
[lines 22-26 in the second column on page 137 of the publication]

"Upon command the computer will play messages and/or advertisements which the switcher will route to an output channel. At a cost of less than \$3500 complete, the Apple II computer and switcher is an economical controller and character generator"

[lines 16-22 in the first column on page 136 of the publication]

"Through the use of telephone interconnection devices (modems), the computer at the head end can be remotely programmed. The cable TV office could change the event file without going to the head end. Similarly, any advertiser could access the computer and change his advertisement on a daily or hourly basis" [lines 4-11 on page 138 of the publication]

Wherein, as described in <u>Schloss et al.</u>, the modified system would have utilized the control "computer" to generate all, or at least some, of the local/regional advertisements that replace the identified portion of the network programming.

- E-20) Here, for completeness of record, it is noted that while conventional TV stations typically operated to "sequentially" mixed/combine the advertising sequences with the TV program sequences, it was a notoriously well known alternative to have simultaneously mixed/combined the advertising sequences with the TV program sequences. This alternative approach was known to have been advantageous in that it allowed the advertising to be displayed without causing a disruption to the TV programming. See, for example:
- A) U.S. patent #2,723,307 to <u>Baracket et al.</u> which was patented in 1955 [note lines 23-31 of column 1]; and
- B) Japanese patent document #51-126712 to Kubota et al. which was published in 1976.
- E-21) Claims 2-6, 11-16, 20-23, 76-81, and 85-94 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of:
- A) Marsden [GB 871,238];
- B) Germany [GB 959,274]; and
- C) <u>Diederich</u> [DE 2,356,969],

in view of the 1980 publication "Controlling Cable Head Ends and Generating Messages by Means of a Micro Computer" by Schloss et al., for the same reasons that were set forth for claims 29 and 30 above.

- E-22) Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of:
- A) Marsden [GB 871,238];
- B) Germany [GB 959,274]; and

C) <u>Diederich</u> [DE 2,356,969],

in view of the 1980 publication "Controlling Cable Head Ends and Generating Messages by Means of a Micro Computer" by Schloss et al., for the same reasons that were set forth for claim 2 above, further in view of the 1978 re-print of the article "Automated Videotape Delay Of Satellite Transmissions" by Chiddix.

The <u>Chiddix</u> article has been cited as evidencing the fact that it was known to have recorded the TV programming being broadcast to local/regional stations for delayed rebroadcast therefrom. In the case of automated commercial insertion systems, it was noted in <u>Chiddix</u> that one had to be sure to record the insertion control signal too [note the second full paragraph in the last column of the article].

Given the showing of <u>Chiddix</u>, the Examiner maintains that it would have been obvious to have further modified the local/regional receiver stations of <u>Marsden</u>, <u>Germany</u>, and <u>Diedrich</u> to have included the recording means described by

<u>Chiddix</u> to delay the received network programming where appropriate (i.e. when the network station and the local regional stations are located in different time zones).

E-23) Claims 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morchand [US patent #3,008,000] in view of Zaboklicki [DE 2,904,981].

1) Morchand discloses a multi-channel interactive TV display system as was set forth above in the rejection of claim 33.

- 2) Claims 34 and 36 differ from the showing of <u>Morchand</u> only in that <u>Morchand</u> did not disclose circuitry for recoding the user's responses and for conveying the so recorded responses to a remote location via the telephone line;
- 3) Zaboklicki also disclosed a multi-channel interactive TV display system as was set forth above in the rejection of claim 2. Zaboklicki evidences the fact that it was known to have been desirable within such interactive systems to have recorded the users responses and conveyed them to a remote location via the telephone line [note figure 4 of Zaboklicki].
- 4) The Examiner maintains that it would have been obvious to one of ordinary skill in the art to have modified the system disclosed by <u>Morchand</u> in accordance with the teachings of <u>Zaboklicki</u> thereby enabling the user's responses recorded and conveyed to a remote location via the telephone line.
- E-24) Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morchand [US patent #3,008,000] in view of Zaboklicki [DE 2,904,981].
- 1) Morchand discloses a multi-channel interactive TV display system as was set forth above in the rejection of claim 33.
- 2) Claim 35 differs from the showing of <u>Morchand</u> only in that <u>Morchand</u> did not disclose circuitry for printing out information corresponding to the second information;
- 3) Zaboklicki also disclosed a multi-channel interactive TV display system as was set forth above in the rejection of claim 2. Zaboklicki evidences the fact that it was known to have been desirable to provided the receiver in such systems a printing capability [e.g. note element 37 of figure 3].
- 4) The Examiner maintains that it would have been obvious to one of ordinary skill in the art to have modified the system disclosed by <u>Morchand</u> in accordance with the teachings of <u>Zaboklicki</u> thereby enabling the second information to be conveyed to a printer for hardcopy reproduction.
- E-25) Claims 76-81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thonnart [US patent #4,413,281] and Zaboklicki [DE 2,904,981].

#### I. The showing of Thonnart and Zaboklicki:

As was described above within paragraph D-3 of this Office action, Thonnart and

Zaboklicki both disclosed interactive TV systems which:

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- 1) Transmitted interactive TV programming to a plurality of receiving stations wherein the TV programming comprised pluralities of analog and digital program segments/fragments;
- 2) Downloaded "logic" sequences (i.e. "software") to the receiver stations so as to instruct the receiver stations as to how to select and assemble/display ones of the transmitted program segments/fragments into a user specific multimedia interactive presentation based on the specific inputs/responses of the user; and
- 3) Added program segment/fragment identifiers to the transmitted program segments/fragments in order to have allowed the receiver station to find and identify those of the transmitted segments/fragments that it needs for its given user specific presentation.

#### II. Differences:

The claims differ from the showing of Thonnart and Zaboklicki in the following ways:

- 1) While the receiver stations in <u>Thonnart</u> comprised first and second receivers (i.e. tuners) for receiving the analog and digital program segments/fragments respectively, <u>Thonnart</u> did not explicitly indicate the receiver stations as having comprised a "microcomputer" for executing the downloaded logic sequences; and
- 2) While the receiver stations in <u>Zaboklicki</u> comprised a "microcomputer" for executing the downloaded logic sequences (i.e. Telesoftware),

Zaboklicki did not explicitly show or indicate an embodiment of invention in which the analog and digital program segments/fragments were conveyed over separate TV channels; i.e. wherein the receiver stations comprised first and second receivers (i.e. tuners).

## III. Obviousness:

- 1) Even if the receiver stations in <u>Thonnart</u> were to have comprised dedicated circuitry for executing the downloaded logic sequences, the Examiner maintains that modifying the receivers with a "microcomputer" represents an obvious upgrade of technology known to those of ordinary skill in the art at the time of Appellants' alleged invention (as evidenced by the showing of <u>Zaboklicki</u>); and, alternatively
- 2) That transmitting the analog and digital program segments/fragments in <u>Zaboklicki</u> via separate/different channels, thereby requiring the receivers to have had separate receivers/tuners, represents a known and obvious design alternative (as evidenced by the showing of <u>Thonnart</u>).

E-26) Claims 85-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thonnart [US patent #4,413,281] and Zaboklicki [DE 2,904,981] for the same reasons that were set forth for claims 76-81 above.

E-27) Claim 95 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zaboklicki [DE 2,904,981] in view of Field et al. [U.S. #4,398,216] and Laviana [U.S. #3,245,157].

#### I. The showing of Laviana and Zaboklicki:

As was described above within paragraph D-3 of this Office action, <u>Laviana</u> and <u>Zaboklicki</u> both disclosed interactive TV systems in which ones of a plurality of transmitted audio signal fragments/segments were selected at each receiver station, based on respective user's inputs, to interactively create a user specific multimedia presentation thereat. In both systems, the multimedia presentation included: at least one video component that was outputted to a video output device; and selected audio signal segments/fragments which were outputted to an audio output device.

## **II. Differences:**

Zaboklicki explicitly indicates that the plurality of audio segments/fragments were to be transmitted to the receiver station locations in a manner analogous to conventional foreign language audio transmissions and, being such, that the audio segments/fragments were to be transmitted to the receiving station using via conventional "audio channels or radio channels". Such conventional transmission schemes having been known to those of ordinary skill in the art as evidenced by U.S. Patent #4,398,216 to Field et al. [e.g., note: the prior art that is described in lines 1-17 of column 2; and the invention of figures 1, 2, and 8]. With respect to the figure 3 receiver station embodiment, Zaboklicki indicates that the audio fragments/segments were selected (i.e. turned on and off) under computer control via some type of audio channel selection circuitry (@ 43) located within the TV

receiver (@ 54). Zaboklicki, however, does not explicitly describe this computer controlled audio channel selection element as having comprised a computer controlled "tuner."

## III. Obviousness:

While Zaboklicki does not explicitly described the audio selection circuitry (43) of his figure 3 receiver station embodiment as having comprised a computer controlled RF "tuner", such a controlled RF "tuner" implementation of the selection circuitry (43) seems to be suggested within the Zaboklicki prior art itself by its noted reference to conventional "radio channels" (again, such a conventional transmission scheme having been known to those of ordinary skill in the art as evidenced by U.S. Patent #4,398,216 to Field et al. [e.g. note the prior art that is described in lines 1-17 of column 2]; i.e., obviously, RF "tuning" circuitry was required to receive RF audio signal segments/fragments conveyed by such explicitly described "radio channels". In case of doubt, however, one needs only turn to Laviana which evidences the fact that it was well known within the interactive TV arts to have utilized separate "radio channels", e.g. separate RF carriers, to have conveyed the respective RF audio program segments/fragments of a complete interactive TV program to the receiving station locations; i.e. wherein the receiving station circuitry necessarily comprised controlled RF tuning circuitry for selectively receiving and outputting the audio signals from ones of the "radio channels"/RF carriers based on the user's inputs/responses [note: lines 69-72 in column 3; and lines 31-40 of column 4]. That is, given such teachings of Laviana, having implemented the audio segment/fragment selection circuitry (43) within Zaboklicki using

an RF tuner represents nothing but an obvious choice of design. That is, the receiver station of Zaboklicki was described as receiving its audio program segments/fragments over RF radio channels via a computer controlled selection device and, as evidenced by the showing of Laviana, a RF "tuner" was a well known device by which such RF segments/fragments were known to have been selected.

With respect to the limitations of the claim:

- a) The "first receiver" of claim 95 reads on that portion of TV receiver (54), e.g., he circuitry controlled by signal (27), of the modified system of <u>Zaboklicki</u> that receives the multi-channel TV signals,
- b) The "second receiver" of claim 95 reads on that portion of TV receiver (54), e.g. the RF tuning circuitry (@ 45), of the modified system of Zaboklicki that receives the RF audio segments/fragments of the additional audio "radio channels";
- c) The "microcomputer" of claim 95 reads on elements (6, 7, 34, 39, and 49) of the modified system of <u>Zaboklicki</u> which inherently compares the user entered responses to information of the interactive programming "script", i.e. provided via the downloaded "Telesoftware", to determine which of the RF audio program segments/fragments were to be tuned to next; and
- d) Wherein the receiver presents a multimedia presentation that includes a the multi-channel TV signal component provided at a first output device (e.g. the CRT of the TV receiver) and an additional audio segment/fragment component provided at a second output device (i.e. the speaker of the receiver (54)).
- E-28) Claims 96, 97, 99, and 100 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Zaboklicki</u> [DE 2,904,981] in view of <u>Field et al.</u> [U.S. #4,398,216] and <u>Laviana</u> [U.S. #3,245,157], for the same reason that were set forth for claim 95 above. Additionally, the following is noted:
- a) With respect to the claims 96 and 97, note figure 4 of Zaboklicki.

E-29) Claims 33, 34, 36, 101 and 102 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Zaboklicki</u> [DE 2,904,981] in view of <u>Field et al.</u> [U.S. #4,398,216] and <u>Laviana</u> [U.S. #3,245,157], for the same reason that were set forth for claims 96, 97, 99 and 100 above.

E-30) Claim 98 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zaboklicki [DE 2,904,981] in view of Field et al. [U.S. #4,398,216] and Laviana [U.S. #3,245,157], for the same reason that were set forth for claim 95 above, further in view of the publication "A Television Facsimile System" by Soejima. The following is noted:

- 1) The receiver station of modified system of <u>Zaboklicki</u> also comprised a "printer" (@ 37) for outputting hard-copy information related to the interactive programming. <u>Zaboklicki</u>, however, does not indicate that this outputted information is obtained from the controlled RF tuner (@45).
- 2) As shown in figure 7, Soejima has been cited to evidence the fact that it was known to have embedded print data within the audio component of TV programming;
- 3) Given the showing of Soejima, the Examiner maintains that it would have been obvious to one of ordinary skill in the art to have utilized the "printer" (@37) of the modified system of Zaboklicki to have printed print data obtained from the RF audio channels; i.e. locating such print data within these RF channels having being an obvious location for data that pertains to specific explanations provided by the audio segments/fragments carried therein.
- E-31) Claims 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zaboklicki [DE 2,904,981] in view of Field et al. [U.S. #4,398,216] and Laviana [U.S. #3,245,157], for the same reason that were set forth for claim 95 above, further in view of the publication "A Television Facsimile System" by Soejima, for the same reason that was set forth for claim 33 above [see the explanation provided in regard to the limitations of claim 98].
- E-32) Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Tsuboka et al.</u> [JP 55-45248] in view of the 1979 article "'TOUCH-TONE' TELETEXT: A COMBINED TELETEXT-VIEWDATA SYSTEM' to <u>Robinson et al.</u>

# I. Conventional TELETEXT/VIEWDATA receiver/decoder structure: As is shown in figure 2, Tsuboka et al. disclose a conventional computer controlled

videotex decoder that comprises:

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- 1) Inputs (@ 2 and 12) for receiving a plurality of signals from external signal sources including:
  - a) TV programming from an external TV programming source;
  - b) Teletext data signal from an external teletext data source; and
  - c) Viewdata from an external viewdata source.
- 2) The memory of a "computer" (e.g. @ 9 and/or 72) for storing first information representing a first Teletext/Viewdata media;
- 3) Computer circuitry (e.g. including CPU 35) which, based on inputs (@ 30) from a user, coordinates (via elements 14 and 19-30) the display/presentation of teletext and/or viewdata images, which images are locally generated from the stored first information, with the display/presentation of the demodulated video component (@21) of the received TV programming; and
- 4) Display circuitry (@ 31) for outputting the resulting combined multi-media presentation to the user.

## **II. Differences:**

Claim 2 differs from the showing of <u>Tsuboka et al.</u> only in that <u>Tsuboka et al.</u> did not indicate a process in which the coordinated display of teletext/viewdata and video was produced based on the a "determined" content of the TV programming.

#### III. "Program-related" videotext data:

The Examiner takes Official Notice that it was notoriously well known to those of ordinary skill in the art at the time of Appellants' alleged invention for conventional teletext services to have carried "program-related" teletext pages; i.e. pages having a "content" that is related to the "content" of associated TV programming (e.g., note: lines 12-20 of the second column on page 30 of the 1976 article "Oracle on Independent Television" by Green et al.; lines 2-7 on page 26 of WO 81/02961 to Campbell et al.; etc,....), Robinson et al. evidences the fact that it was known for the associated TV

programming to have a "content" that explicitly refers to the associated "program-related" videotex pages; e.g.

"Viewers could get the latest details on breaking stories or more detail on stories that interest them. News programs on television could refer a viewer to these pages to get the detail that is cut out due to time limitations" [lines 18-20 of the first column on page 300 of Robinson et al.]

In accessing such a page, the user inherently selected the program-related videotex page by:

1) "Determining a content" of the TV programming medium; i.e., the user determines that the content of the TV programming contains explicit reference to (i.e. an "identifier" of) the program-related teletext page that was to be selected by the user.

## IV. Obviousness:

It would have been obvious to one of ordinary skill in the art to have used the receiver circuitry described in <u>Tsuboka et al.</u> for the intended purpose of receiving and displaying conventional videotex data, wherein the "program-related" videotext data described in <u>Robinson et al.</u> obviously represented a specific example/subset of the conventional videotex data that was to be received and displayed by the <u>Tsuboka et al.</u> receiver.

- E-33) Claims 3, 5-8, and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Tsuboka et al.</u> [JP 55-45248] in view of the 1979 article "'TOUCH-TONE' TELETEXT: A COMBINED TELETEXT-VIEWDATA SYSTEM" to <u>Robinson et al.</u> for the same reasons that were set forth for claim 2 above.
- E-34) Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Tsuboka et al.</u> [JP 55-45248] in view of the 1979 article "TOUCH-TONE' TELETEXT: A COMBINED TELETEXT-VIEWDATA SYSTEM" to <u>Robinson et al.</u> for the same reason that is set forth for claim 2 above. The following is noted:
  - a) The system disclosed by <u>Tsuboka et al.</u>, modified by <u>Robinson et al.</u>, inherently included conventional TV video and audio component processing circuitry for processing the received TV signal to provide a first TV media presentation having

an "identifier" therein (i.e. containing the explicit reference to a program-related videotext image);

- b) The user of the system disclosed by <u>Tsuboka et al.</u>, modified by <u>Robinson et al.</u>, processed the identifier to identify "content" of the TV programming (i.e. the user processed the explicit reference contained therein to identify the page number of the program-related videotex page that is to be inputted/selected by the user;
- c) The user then entered the page number into the receiver (@ 37) upon which said receiver, under control of the software being executed by CPU (35), caused the program-related videotext image "medium" to be provided in a coordinated fashion with the TV programming "medium"; and
- d) The output device (31) for outputting the resulting combined medium presentation to the user.

E-35) Claims 21-23, 37, 67, 68, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Tsuboka et al.</u> [JP 55-45248] in view of the 1979 article "TOUCHTONE' TELETEXT: A COMBINED TELETEXT-VIEWDATA SYSTEM" to <u>Robinson et al.</u> for the same reason that is set forth for claim 20 above. The following is noted:

E-36) Claims 2 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Betts et al. [GB 1,556,366] in view of the "MODE II" captioning feature of the "ANTIOPE" teletext standard as discussed in: the 1980 article "Development & Applications of the Antiope-Didon Technology" by Guillermin; the 5/1981 "CBS/CCETT NORTH AMERICAN BROADCAST TELETEXT SPECIFICATION (EXTENDED ANTIOPE) publication; and the 1980 article entitled "ANTIOPE TELETEXT CAPTIONING" by Sechet.

#### I. The showing of Betts et al.:

Betts et al. has been cited as evidencing the fact that it was widely known to those of ordinary skill in the art, at the time of Appellants' alleged invention, that it was both desirable and advantageous to have implemented teletext receiving/decoding circuitry using a software driven CPU/computer in place of dedicated circuitry [NOTE: lines 50-54 and 70-74 on page 1].

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II. "MODE II" captioning:

1) Those of ordinary skill in the art, at the time of Appellants' alleged invention, had recognized that there was a need and desire to transmit closed captioning data pertaining to multiple different languages within each TV program transmission. Because teletext captions had to be transmitted sequentially through the TV network, it was found to be difficult to simultaneously synchronize the display of the different captions/languages to the same TV programming. Hence, a "Mode II" captioning feature was developed and added to new teletext "standards" (e.g. ANTIOPE) for the expressed purpose of synchronizing multiple captions to the same program.

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"The possibilities of teletext closed captioning for the hearing-impaired and for foreigners are well known and were first experimented in the United Kingdom. The problem of synchronizing the TV program and the captions was not really solved, except at the price of heavy time delay constraints. If several different languages are to be captioned at the same time with a given program, new developments are needed, because asynchronism appears for multilanguage captioning applications. The new standards make it very simple to add sophisticated captioning options to a normal teletext decoder: in this new process, the synchronism control signal are completely separate from the 'character attributes' - they are actually considered as a 'message attribute'.

[e.g. section 5.1.3 on page 33 of the 3/1980 publication "Development & Application of the Antiope-Didon Technology]

2) The way in which these "new" teletext standards solved the synchronism problem was best explained among the prior art of record by the "CBS/CCETT NORTH AMERICAN BROADCAST TELETEXT SPECIFICATION (EXTENDED ANTIOPE)" which is dated May 20, 1981. [SEE: sections 7.0-7.3 on pages 135-138; and sections 8.9.1 to 8.9.2.2.2 on pages 159-162]. That is, as explained within this publication:

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a) Different classes of captioning (and different levels thereof) were transmitted from the transmitter as conventional teletext pages prior to the time that they were to be displayed;

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- b) Each receiver captured and stored (but did not display) the page of teletext data which corresponded to the class (and the level) of captioning that was selected and desired by the user;
- c) At the desired time of display, a "reveal"/"unmask" message was transmitted from the transmitter station which caused/triggered the stored captions at the respective receivers stations to be simultaneously outputted and displayed in precise synchronism with the TV programming.

That is, the Mode II captioning feature provided the mechanism by which multiple program related captions could now be transmitted sequentially and asynchronously within the TV programming, while enabling each of these sequentially transmitted captions to be displayed simultaneously and in precise synchronism with the same TV programming at different receiver stations in response to the receipt of the same reveal/unmask display signal.

3) The 8/1980 publication "ANTIOPE TELETEXT CAPTIONING" also describes this same "MODE II" captioning feature of the ANTIOPE teletext standard. This publication has been cited in response to arguments that have been submitted by Appellants throughout the present prosecution (e.g., Appellants have attempted to distinguish the claimed invention over applied teletext prior art by arguing that the signals of teletext are not conveyed within pluralities of discrete packet signals that, therefor, must be assembled/re-assembled on the receiver side of the network. As is evident from the cited prior art, Appellants' argument is simply untrue (i.e., even the

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shortest of teletext messages were conveyed within a plurality of discrete teletext packet signals). Namely:

a) This publication makes it clear that the "MODE II" captioning feature of ANTIOPE utilizes the same teletext equipment that is used for the teletext service itself being that the captions are transmitted as standard teletext pages.

"When Antiope is employed for captioning, it uses the same equipment as for teletext" (the second column of page 618)

"Each caption is broadcast in the form of a page which is identical to a teletext page. The page number is used to select the language – this is the number the user keys on the decoder keypad. The operation is the same as for the selection of a teletext page; the decoder functions are identical" (the first column of page 619)

b) This publication makes it clear that all the teletext pages of the ANTIOPE standard were transmitted within the "discrete teletext transport packets" of the DIDON standard and that even the shortest of the captions (i.e. the word "yes") had to be transmitted using more than one of these discrete DIDON transport packet.

"The word 'yes', wherever it is located on the screen, if it is white on black, is coded in 23 bytes (i.e. 1.15 DIDON packets), and text containing 40 characters requires 60 bytes (i.e. 3 packets)" (the second column on page 619)

c) This publication re-emphasizes that it was the ability of the ANTIOPE system to mask (conceal) and unmask (reveal) teletext messages which enabled the ANTIOPE system to separate the act of transmitting messages/captions from the act of displaying them (i.e. a key feature that is vital to the implementation of the MODE II captioning).

"Considerable flexibility is also given by the use of text masking and unmasking attributes. They enable us to differentiate reception, which can be stored, from display, which is requested a particular moment without being dependent on the time of transmission" (page 619)

## III. Appellants' Disclosed Invention and MODE II captioning:

- 1) In Appellants' disclosed "WALL STREET WEEK" application, a "command signal" was embedded, at a specific time, within the "Wall Street Week" TV program being broadcast from a transmitter station. At each receiver station, said "Wall Street Week" program was received and the "command signal", embedded therein, was detected. At each receiver station, the detected "command signal" triggered a locally generated user specific graphic to be displayed as an overlay over the displayed video portion of said received "Wall Street Week" program. Thus, via the embedding of a single "command signal", the display of different locally generated user specific overlays at different receiver stations were all "synchronized" to occur at said specific time within the "Wall Street Week" program.
- 2) As is clearly evident from the prior art of record, the MODE II captioning feature of the ANTIOPE teletext standard also utilized a single common display "command signal" to cause different "locally generated" program related teletext captioning images to be simultaneously overlaid at respective TV receiver stations in precise synchronism with the TV programming to which they relate.

Namely, in mode II captioning, reveal/unmask "command signals" were embedded, at specific times within, a transmitted TV program being broadcast from a transmitter station. At each receiver station, said program was received and the reveal/unmask "command signals", embedded therein, were detected. At each receiver station, each detected reveal/unmask "command signal" triggered a locally generated user specific

graphic (e.g. a respective "program related caption") to be displayed as an overlay over the displayed video portion of said received TV program. Thus, via the embedding of each reveal/unmask "command signal", the displays of different "locally generated" user specific overlays at different receiver stations were all "synchronized" to occur at the specific times within the TV program.

## IV. Obviousness:

Given the known advantages provided thereby, the Examiner maintains that it would have been obvious to one of ordinary skill in the art to have utilized computer implemented teletext receivers/decoders, e.g., of the type described in <u>Betts et al.</u>, for receiving and displaying conventional teletext data of the "ANTIOPE" teletext standard including conventional "Mode II" captioning provided therein. Note too that section 5.3.1.2 on page 47 of the 8/1981 "EIA System Analysis Chart" publication indicates that a "computer/software" implementation was "mandatory" for "System C" teletext decoder applications. Such computer implemented teletext receivers/decoders would have necessarily comprised:

- 1) Circuitry/software for receiving a plurality of signals from an external signal source
- [i.e. the teletext receiver/decoder necessarily receives the TV programming containing the mode II captioning];
- 2) Circuitry/software for storing information from the received plurality of signals corresponding to a first media
- [i.e. the teletext receiver/decoder necessarily receives and stores that portion of the Mode II captioning that pertains to the language and level selected by the user];

- 3) Circuitry/software for determining "content" of a second medium received in said plurality of signals
- [i.e. as in the case of Appellants' own alleged invention, this limitation refers to nothing more than the detection of the "display control signal" being that said display control signal at least represents the "content" of the audio component of the TV programming to which the locally generated images/captions are to be synchronously displayed];
- 4) Circuitry/software for coordinating, under the computer implemented receiver/decoder control, the display of the stored information with said second medium
- [i.e. the computer implemented decoder necessarily coordinates the display of the Mode II captions with the displayed audio and video component of the received TV programming in response to the received "display control signal" (i.e.,. the "reveal"/"unmask" signals of Mode II captioning)]; and
- 5) Circuitry for outputting the multimedia presentation to the respective user base on the step of coordinating
- [i.e. the receiver/decoder necessarily comprises a display device for displaying the resulting captioned TV presentation].

And, for completeness of the record, the Examiner continues to reject Appellants' assertion that teletext images, e.g. such as *ANTIOPE* captions, were not "locally generated" images, because teletext images clearly were "locally generated" images. [SEE: paragraph 13 of this Office action].

- E-37) Claims 3-8, 11, 12, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Betts et al.</u> [GB 1,556,366] in view of the "MODE II" captioning feature of the "ANTIOPE" teletext standard as discussed in: the 1980 article "Development & Applications of the Antiope-Didon Technology" by <u>Guillermin</u>; the 5/1981 "CBS/CCETT NORTH AMERICAN BROADCAST TELETEXT SPECIFICATION (EXTENDED ANTIOPE)' publication; and the 1980 article entitled "ANTIOPE TELETEXT CAPTIONING" by <u>Sechet</u>, for the same reasons that were set forth for claims 2 (and 13-16) above. Further, the following is noted:
  - 1) With respect to claim 6: The Examiner maintains that it would have been obvious for the received TV programming to have been "Network" TV programming rebroadcast to the receivers/decoders video local/intermediate TV stations as was notoriously well known in the art;

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- 2) With respect to claims 7 and 8: As noted above, with respect to Appellants' own alleged invention (i.e., the alleged section 112 support), the recited "content" merely refers to the fact that the "display command signal" of Appellants' "Wall Street Week" embodiment arguably identified location of a "content" in the audio/video components of the TV programming with which the display of the "locally generated" images are to be synchronized. The same is true of the "display control signal" of Mode II captioning too; i.e. the display control signal (i.e. the reveal/unmask signal) identifies the location of a "content" of the audio/video components of the TV programming with which the display of the Mode II captions are to be synchronized;
- 3) With respect to claims 11 and 12: The Examiner maintains that a teletext channel is, by definition, a "digital data channel".
- 4) With respect to claims 17 and 18: The Examiner takes Official Notice that it was notoriously well known in the TV art to have been desirable to have included video recording devices at household receiving locations for recording broadcasted TV programming for later/delayed playback (i.e. for the convenience of the users). The Examiner maintains that it would have been obvious for the TV programming being provided to the mode II captioning receiver to have comprised such conventionally recorded/delayed TV programming.
- E-38) Claims 37-41 and 67-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Betts et al. [GB 1,556,366] in view of the "MODE II" captioning feature of the "ANTIOPE" teletext standard as discussed in: the 1980 article "Development & Applications of the Antiope-Didon Technology" by Guillermin; the 5/1981 "CBS/CCETT NORTH AMERICAN BROADCAST TELETEXT SPECIFICATION (EXTENDED ANTIOPE)" publication; and the 1980 article entitled "ANTIOPE TELETEXT CAPTIONING" by Sechet, for the same reasons that were set forth for claims 3-8, 11, 12, 17, and 18 above.
- E-39) Claims 70-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Betts et al.</u> [GB 1,556,366] in view of the "MODE II" captioning feature of the "ANTIOPE" teletext standard as discussed in: the 1980 article "Development & Applications of the Antiope-Didon Technology" by <u>Guillermin</u>; the 5/1981 "CBS/CCETT NORTH AMERICAN BROADCAST TELETEXT SPECIFICATION (EXTENDED ANTIOPE)' publication; and the 1980 article entitled "ANTIOPE TELETEXT CAPTIONING" by <u>Sechet</u>, for the same reasons that were set forth for claims 2 (and 13-16) above. Further, the following is noted:
  - 1) The recited "second medium" of the claims reads on the teletext service of the prior art that is providing the teletext data stream that includes the MODE II captions;

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- 2) The recited "information" of the claims, i.e. that is "generated based on identifying content of said second medium", reads on the respective caption information that is selectively captured at each receiver pertaining to a specific "content" of the "second medium" (i.e. a specific language/level of captioning) that is identified by the respective receiver stations based on inputs inputted by the user;
- 3) The recited "first medium" of the claims reads on the TV programming that has been captioned using MODE II captioning; and
- 4) The recited "identifier" of the claims reads on the reveal/unmask code which identifies a "content" of the second medium (i.e. a specific location therein as in the case of Appellants' own alleged invention as argued under section 112-1) at which the display of the locally generated MODE II captions are to be simultaneously displayed at the respective receiver locations.

E-40) Claims 85-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Betts et al.</u> [GB 1,556,366] in view of the "MODE II" captioning feature of the "ANTIOPE" teletext standard as discussed in: the 1980 article "Development & Applications of the Antiope-Didon Technology" by <u>Guillermin</u>; the 5/1981 "CBS/CCETT NORTH AMERICAN BROADCAST TELETEXT SPECIFICATION (EXTENDED ANTIOPE)' publication; and the 1980 article entitled "ANTIOPE TELETEXT CAPTIONING" by <u>Sechet</u>, for the same reasons that were set forth for claims 70-72 above.

E-41) Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over the 1979 publication entitled "TELESOFTWARE: HOME COMPUTING VIA BROADCAST TELETEXT" by <u>Hedger</u> in view of the 1980 publication entitled "A Public Broadcaster's View of Teletext in the United States" by <u>Gunn et al.</u> and the 1975 U.K. Patent document #1,405,141 to <u>Yoshino et al.</u>

#### I. The Showing of Hedger:

Hedger evidences the fact that it was notoriously well known in the art:

- a) To have provided a software driven "computer" at each of respective TV receiver locations of a TV network (note figure 1); and
- b) To have used the pages of a standard teletext service as the transport vehicle for downloading computer software (i.e. "Telesoftware") to said respective computers [see the discussion under the heading "1. <u>INTRODUCTION</u>" on page 279].

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## **II.** The Showing of Gunn et al:

Gunn et al. evidences the fact that it was known in the art for "Telesoftware" (i.e. computer software downloaded within via a standard teletext data service) to be associated with broadcast TV programming and, thereby, "program related".

For example, in a Gunn et al. "Wall Street Week" application, each user at a respective TV receiver station location:

a) Downloaded specific program related "Telesoftware", e.g. software for analyzing a stock portfolio, to the computer at their receiving station location; and

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b) Received verbal instruction from a guest on the broadcasted "WALL Street Week" TV show explaining exactly how to use this downloaded software to analyze their stock portfolio,

Whereby each user utilized the downloaded software to perform the respective analysis concurrent with the TV program and the verbal instruction provided therein.

[SEE: the "WALL STREET WEEK" application that is described in lines 2-17 on the fifth page of the <u>Gunn et al.</u> publication].

#### III. The Showing of Yoshino et al.:

Yoshino et al. not only disclosed a television receiver station which operated to simultaneously display on a single CRT (18) locally generated image data provided from an "electronic table computer" and the video signal component of a received television signal,

"The present invention also provides a television receiver on the picture tube of which a television program and the result of the computing process are shown simultaneously"

[lines 11-113 on page 4]

but Yoshino et al. also explicitly evidences the fact that those of ordinary skill in the art had understood it to be "advantageous", e.g. as of its 1975 publication date, to have enabled locally generated image data from a computer to be superimposed upon displayed TV programming at TV receiving stations.

"As described above there is obtained various advantages such as ... the display of computed information on the picture tube of a television receiver in superposition with the television program" [lines 68-80 on page 4]

## IV. Obviousness:

1) One of ordinary skill in the art would have understood the fact that the receiver structure shown in figure 1 of <u>Hedger</u> was implemented for the generic purpose of receiving and executing "Telesoftware" pertaining to *any* application and was not limited only to the specific applications that were discussed in the publication. [e.g. note the discussion under the heading "6. <u>APPLICATIONS FOR TELESOFTWARE</u>" on page 285]

One of ordinary skill in the art would have recognized the fact that the program related "Telesoftware" of the "WALL Street Week" application described in <u>Gunn et al.</u> merely represents a program related "Telesoftware" application that was not explicitly described/exemplified within the <u>Hedger</u> publication itself.

Being such, the Examiner maintains that it would have been obvious to one of ordinary skill in the art one of ordinary skill for the conventional Telesoftware receiver structure of

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Hedger to have been utilized to receive and execute the "Telesoftware" pertaining to the "Wall Street Week" application that was described in <u>Gunn et al</u>. When executing Telesoftware pertaining to "program related" applications, it would have been obvious, and in fact necessary, to have enabled the display device in Hedger's figure 1 (i.e. the "Television Receiver") to simultaneously display the computer generated video and the received "Wall Street Week" TV programming; i.e. a display feature that, as evidenced by Yoshino et al., was notoriously well known in the TV/Computer display arts.

- 2) With respect to the limitations of claims 2, the following is noted:
  - a) The step of "receiving" a plurality of signals is met by the modified system of <u>Hedger</u> being that said modified system necessarily receives the broadcasted "WALL STREET WEEK" programming and the standard teletext service that provides the required program related "Telesoftware";
  - b) The step of "storing" information is met by the modified system of <u>Hedger</u> being that said modified system necessarily received, extracted, and stored the machine code pertaining to the downloaded program related "Telesoftware";
  - c) The step of "determining content" of the second medium is met by the modified system of <u>Hedger</u> being that said user of the modified system necessarily determines "audio" content of the received TV programming when receiving the verbal instruction;
  - d) The step of "coordinating," under computer control, a presentation using the stored information with the second medium based on the determined content is met by the modified system of <u>Hedger</u> being that said user of the modified system necessarily controls the computer to analyze his portfolio and create displays thereof based on the determined instruction content of the audio; and
  - e) The step of "outputting" is met by the modified display device the modified <u>Hedger</u> system for reasons that are fully addressed above.

E-42) Claims 3, 5-8, and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the 1979 publication entitled "TELESOFTWARE: HOME COMPUTING VIA BROADCAST TELETEXT" by <u>Hedger</u> in view of the 1980 publication entitled "A

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Public Broadcaster's View of Teletext in the United States" by Gunn et al. and the 1975 U.K. Patent document #1,405,141 to Yoshino et al.

- 1) With respect to claim 6: The Examiner maintains that it would have been obvious for the received TV programming to have been "Network" TV programming rebroadcast to the receivers/decoders video local/intermediate TV stations as was notoriously well known in the art;
- 2) With respect to claims 11 and 12: The Examiner maintains that a teletext channel is, by definition, a "digital data channel".
- 3) With respect to claims 17 and 18: The Examiner takes Official Notice that it was notoriously well known in the TV art to have been desirable to have included video recording devices at household receiving locations for recording broadcasted TV programming for later/delayed playback (i.e. for the convenience of the users). The Examiner maintains that it would have been obvious for the TV programming being provided to the mode II captioning receiver to have comprised such conventionally recorded/delayed TV programming.

E-43) Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Hutt et al.</u> [U.S. #3,961,137] in view of <u>Betts et al.</u> [GB 1,556,366].

#### I. The showing of Hutt et al.:

As is shown in figures 1 and 6, <u>Hutt et al.</u> disclosed a receiver station for outputting/displaying a multimedia presentation [i.e., the "VIDEO AND SUPERIMPOSED TEXT" signal of figure 4], wherein the receiver station is "adapted to "receive a plurality of signals [i.e. within element 11 of figure 4], which received signals are transmitted to the receiver station from an external TV transmitting station source [not shown]. These received signals are provided to element 12 of figure 4. The receiver station comprises:

1) Circuitry for receiving the plurality of signals [within element 11] wherein the received signals include a first digitally encoded text-type media and a second analog video type media;

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- 2) Circuitry [e.g. the "PAGE STORE" of figure 6 that is located within the "TEXT SIGNAL GENERATOR" of figure 4] for storing information of the digitally encoded text-type media;
- 3) Circuitry for detecting [i.e., thereby "determining"] the sync signal "content" of the video-type media [the "Sync. Separator" of figure 4];
- 4) Circuitry [i.e., figure 6] for coordinating the generation of the multimedia presentation using the stored information and the sync signal content [e.g. the "LINE SYNC" and the "FIELD SYNC" of figure 6] that as detected/"determined" above; and
- 5) Outputting the so coordinated multi-media presentation so that the that portion of the presentation which is provided by the information has a predetermined relationship to said detected/"determined sync signal contents [note that the portion of the presentation that is generated from the stored information necessarily has a specific time relationship to the detected/determined sync signal content of the video media in order for it to have been properly superimposed over the video].

#### II. Differences:

Claim 2 differs from the showing of <u>Hutt et al.</u> only in that claim 2 recites that the "coordinating step is performed at the receiver station under "computer control."

## III. Obviousness:

At the time of Appellants' alleged invention, it was widely recognized by those of ordinary skill in the art that "computer" implementations of text receiving and generating circuitry of the type described in <u>Hutt et al.</u> had real advantages over the dedicated circuit approach [SEE: lines 50-55 on page 1 of <u>Betts et al.</u>]. In light of such knowledge, the Examiner maintains that it would have been obvious to one of ordinary skill in the art to have implemented the text receiving and generating circuitry in <u>Hutt et al.</u> via a computer to obtain those same advantages (i.e. "simplification").

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E-44) Claims 3-6, 11 -14, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Hutt et al.</u> [U.S. #3,961,137] in view of <u>Betts et al.</u> [GB 1,556,366] for the same reason that was set forth for claim 2 above. Additionally, the following is noted:

- 1) With respect to claims 6 and 18: It is noted that most conventional TV stations which broadcast/cablecast TV signals to household receiving location are intermediate station in that they re-broadcast Network TV programming that is broadcasted to them. One of ordinary skill in the art would have understood the fact that the "receiver station" described by Hutt et al. was intended for use in such conventional TV networks.
- 2) With respect to claims 13 and 14: The Examiner note that the sync signal components of a video signal are "identifiers" which identify the specific sync/timing content of the video signal.

E-45) Claims 2, 3, 4, 10, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Fujino et al.</u> [U.S. #4,675,737].

## I. The showing of Fujino et al.:

As is shown in figures 1, <u>Fujino et al.</u> disclosed a receiver station for outputting a multimedia presentation (note lines 1-16 of column 3). The receiver station is "adapted to receive a plurality of signals" in that it comprises:

- 1) A video reproducing apparatus (e.g. 1 of figure 1) which receives a first signal representing an encoded video signal "media", wherein the first signal is received from an external source via a first recording medium (e.g. via a video disc); and
- 2) A supplemental apparatus (e.g. 2 of figure 1) which receives a second signal representing encoded textual "media", wherein the second signal is received from an external source via a second recording medium (e.g. the ROM cartridge 65 of figure 2).

In operation, the receiver station operated to:

a) To receive said plurality of signals comprised of at least two media as has addressed above;

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b) To store textual "media" from the second signals via latching circuitry (e.g. 52 and 53 of figure 2);

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- c) To determine "content" of a second medium within said plurality of signals wherein this limitation read on:
  - 1. The sync separator 12 of figure 2 which detects (and thereby "determines") the sync signal content of the video signal "media"; or
  - 2. Data detection circuitry (e.g. 13, 20, 22 of figure 2) which detects (and thereby "determines") a data signal content of the video signal "media";
- d) To coordinate, via the determined sync and data contents, the display/presentation of the stored information with the display/presentation of the video signal media; and
- e) Outputting the coordinated presentations as said multimedia presentation.

# II. Differences:

Claims 2-4, 10, and 17 differ from the showing of <u>Fujino et al.</u> only in that the claim recites "a computer" wherein the supplemental circuitry of figure 2 in <u>Fujino et al.</u>, e.g., as illustrated, seems to be implemented using dedicated circuitry.

#### III. Obviousness:

The Examiner takes Official notice that it was notoriously well known in the signal processing art to have used software driven "computers" in place of dedicated hardware when implementing signal processing circuitry; i.e., wherein the "computer" implementation was known to have been advantageous in its flexibility (i.e. the software could be easily upgraded and modified). The Examiner maintains that it would have been an obvious choice of design to have implemented the processing circuitry shown in

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figure 2 of <u>Fujino et al.</u>, i.e., in place of dedicated circuitry, to obtain advantages associated therewith.

E-46) Claims 7, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Fujino et al.</u> [U.S. #4,675,737] for the same reasons that were set forth for claims 2-4, 10, and 17 above.

- a) With respect to claim 7: It is noted that the audio signal of TV programming it inherently used to explain the action that is occurring within the video portion. Since subtitle information is a text version of the audio, the subtitle information also explains said video action.
- b) With respect to claims 13-15: It is noted that data detection circuitry (e.g., 13, 20, 22 of figure 2) detects an "identifier" that is embedded within the video signal wherein the identifier identifies, directly and indirectly, time and audio content of the video signal.

E-47) Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over the notoriously well known "Mode II" captioning feature of a conventional ANTIOPE teletext data service (as discussed in paragraph D-2 of this Office action) in view of notoriously well known computer driven Teletext decoder structure (as discussed in paragraph C-4 of this Office action). Specifically, the following is noted:

#### I. Mode II captioning of ANTIOPE:

At the time of Appellants' alleged invention, one of ordinary skill in the art would have recognized the fact that the "MODE II" captioning feature of ANTIOPE, as described within the prior art that was discussed in paragraph D-2 of this Office action, necessarily included the following structure:

- a) TV signal transmission circuitry that was required to transmit:
  - 1) The video programming signals that were to be captioned via the explicitly described program related MODE II captioning; and, embedded therein,
  - 2) The packets of teletext data signals which carried the teletext information of the ANTIOPE teletext service including the explicitly described teletext information of said MODE II captioning; and

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- b) A multiplicity of TV receiving household TV receiver stations each of which included:
  - 1) A respective one of the explicitly described multiplicity of teletext data decoders each of which, as described, necessarily operated to:
    - a. Receive the transmitted video and teletext signal from the TV signal transmitter;
    - b. Extract the embedded packets of ANTIOPE teletext data therefrom;
    - c. Decode the extracted packets to detect instruction information pertaining to the user specified type of captioning, e.g. the "language" and "level" of captioning, that was selected by the respective user;
    - d. Capture/store, but not displaying, the detected user specified instruction information in memory;
    - e. Decode subsequent ones of the extracted packets to detect the described "reveal" command which corresponds to the "class" of the user selected captioning (corresponding to the recited step of "determining content");
    - f) Provide the captured instruction information to a character generator to locally generate image data representing the user specific captioning signals; and
    - g) Transmit the locally generated user specific captioning image signals to an "output display device" for display with the video programming signal of the received TV programming thereby providing a coordinated multimedia presentation (e.g. captioned video).

## II. Differences:

Claim 2 differs from MODE II captioning of ANTIOPE as discussed above only in that it in that it is unclear whether the "MODE II" feature of ANTIOPE constituted a "basic" or "intermediate" level feature that could be performed by a "basic" or "intermediate" level

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ANTIOPE decoder or, alternatively, whether the MODE II captioning feature constituted an "advanced" level feature which had to be performed by an "advance" level ANTIOPE decoder. Thus, it is unclear whether or not a "computer" implementation of an ANTIOPE decoder which performed MODE II captioning was "mandatory"/required.

### **III.** Obviousness:

Regardless, for the reasons discussed in paragraph C-4 of this Office action, the Examiner maintains that having implemented the ANTIOPE decoder for MODE II captioning using a "computer" represented, at best, a notoriously well known and obvious choice of design given the well known advantages associated therewith.

E-48) Claims 3-8, 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the notoriously well known "Mode II" captioning feature of a conventional ANTIOPE teletext data service (as discussed in paragraph D-2 of this Office action) in view of notoriously well known computer driven Teletext decoder structure (as discussed in paragraph C-4 of this Office action), for the same reasons that were set forth for claim 2 above. Specifically, the following is noted:

- 1) With respect to claims 3 and 4, the Examiner notes that a "computer" is simply a device that computes. Thus, the question as to whether the "memory" of the decoder in part of the "computer" or peripheral to the "computer" is merely a question of semantics.
- 2) With respect to claim 6, the Examiner notes that TV receivers typically received their TV signals from local TV stations that were "intermediate" to a major national network station. It would have been obvious to one of ordinary skill in the art for the TV signal in the modified system set forth above to have been received from the local station of such a typical TV network.
- 3) With respect to claims 7 and 8, it is noted that the audio content of the audio portion of a TV programming, and hence the captioning portion thereof too, inherently functions to provide a verbal explanation of the programming.
- 4) With respect to claims 11 and 12, it is noted that the teletext service is inherently provided via a digital data channel.

- 5) With respect to claims 13-16, it is noted that the "reveal" code(s) of the prior represent "identifier(s)" [e.g. for example, they identify a time in the second medium (i.e., the TV programming signal) signal at which program related captions are to be displayed].
- 6) With respect to claims 17, it is noted that it was notoriously well known in the TV art to have recorded transmitted TV programming via a VCR to have allowed the transmitted programming to be reproduced at a time that is more convenient to the user. The Examiner maintains that it would have been obvious for the TV programming of the modified prior art to have been recorded at at least some of the receiver station in this notoriously well known fashion.
- 7) With respect to claims 18, it is noted that "cable" is a known and obvious way in which TV programming signals were transmitted to households from intermediate TV stations.
- E-49) Claims 20-23, 37-41, 67-72 and 85-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over the notoriously well known "Mode II" captioning feature of a conventional ANTIOPE teletext data service (as discussed in paragraph D-2 of this Office action) in view of notoriously well known computer driven Teletext decoder structure (as discussed in paragraph C-4 of this Office action), for the same reasons that were set forth for claims 3-8 and 11-18 above. The following is noted:
- 1) Each page of displayable Teletext data, including each page of caption data, inherently represents a series of instructions which must be executed by the teletext decoder in order to locally generate a corresponding displayable image [see paragraph C-3 of this Office action];
- 2) In MODE II captioning, each the "reveal" codes represent a "control signal" which identifies content of the first TV signal medium (e.g., a timing content, an audio content, etc, ...), and which causes the instructions from a series of caption pages to be executed by the decoder (i.e., by the "computer" implemented decoder) so as to generate a corresponding series of caption images;

Wherein the caption images of MODE II captioning, by definition, are displayed over the video component of the TV signal with which it is "related" so as to create a combined multimedia (video/text/graphic/audio) presentation.

E-50) Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over the 1979 publication "The Concept of a Universal 'Teletext' (broadcast and interactive Videotex) Decoder, Microcomputer Based" by <u>Marti</u> in view of the notoriously well known Mode II

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Captioning feature of the ANTIOPE teletext standard as described in the 1981 "CBS/CCETT NORTH AMERICAN BROADCAST TELETEXT SPECIFICATION (EXTENDED ANTIOPE)" publication.

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#### I. The showing of Marti:

Marti recognized the fact that "all" videotex decoders have a similar structure.

"A decoder for Videotex services, (whatever the name given to the various systems, Teletext, Antiope, Viewdata, T.V. text, ...) is composed of four main parts:

- a data acquisition unit;
- a processing unit;
- a page store;
- a display processor."

[see the last 8 lines on page 1 of the publication]

Based on this recognition, Marti describes and illustrates the "universal" videotex decoder structure of figure 3 that comprises a software driven microprocessor/"computer" [see section "3" of the publication and, in particular, section 3.2 of the publication]. As described, the "universal" decoder could be configured (and/or reconfigured) to decode and display "any" kind of videotex data/services simply by programming (and/or reprogramming) the microprocessor/"computer" of the universal decoder with the appropriate application specific software [note lines 3-22 on page 6 of the publication]. Marti also taught a process by which the application specific software was provided to the decoder from:

- 1) a local memory (cassette or bubble); or
- 2) from "the line (broadcast or telephone)".

[see lines 13-14 on page 6 of the publication]

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One of the specific applications that is described as being provided for is "software" pertaining to the decoding and display of ANTIOPE videotext data [e.g., lines 3-8 on page 6 of the publication].

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# II. The showing of the "CBS/CCETT" publication:

The Examiner takes Official Notice that the "MODE II" captioning feature of the ANTIOPE videotext specification was notoriously well known in the art at the time of Appellants' alleged invention; i.e., evidence of this fact being illustrated by the cited "CBS/CCETT" publication [note pages 135-138 therein].

## In MODE II captioning:

- 1) Different "pages" of program related teletext information, pertaining to different classes and levels of captioning, are superimposed onto the TV programming signal to which they are related as part of a normal ANTIOPE teletext service;
- 2) The combined TV signal transmission is distributed to a plurality of receiver locations, at least some of which include ANTIOPE videotex decoders which are capable of displaying "MODE II" captioning;
- 3) Each of the decoders that are capable of displaying MODE II captioning, received an input from its respective user specifying the class and level of captioning which he/she desires;
- 4) Each of the MODE II capable decoders then receives and captures, but does not display, the "page" of data which corresponds to the specific class and level that its user selected;
- 5) Upon the detection and receipt of a subsequently transmitted "reveal" command, each of said MODE II capable decoders then executes the captured page of data pertaining to its user selected class and level of captioning to generate and output respective user specific image data that is displayed, in a coordinated fashion, over (i.e., "boxed" or "keyed" into) the video "data" component of the TV signal within which it was embedded.

#### **III. Obviousness:**

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When implementing the "universal" decoder that was described by Marti, to receive, decode, and display ANTIOPE videotext data as was also described by Marti, it would have been obvious to one of ordinary skill for the software being loaded into the decoder to have included programming needed to execute any and all of the features that were defined by ANTIOPE specification. More specifically, given the showing above, the Examiner maintains that it would have been obvious to one of ordinary skill in the art to have programmed the "universal" decoder of MARTI with software which enabled the "universal" decoder to have received and displayed "MODE II" captioning according to the ANTIOPE videotex specification.

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- E-51) Claims 3-8, 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the 1979 publication "The Concept of a Universal 'Teletext' (broadcast and interactive Videotex) Decoder, Microcomputer Based" by Marti in view of the notoriously well known Mode II Captioning feature of the ANTIOPE teletext standard as described in the 1981 "CBS/CCETT NORTH AMERICAN BROADCAST TELETEXT SPECIFICATION (EXTENDED ANTIOPE)" publication, for the same reason that was set forth for claim 2 above. Specifically, the following is noted:
  - 1) With respect to claims 3 and 4, the Examiner notes that a "computer" is simply a device that computes. Thus, the question as to whether the "memory" of the decoder in part of the "computer" or peripheral to the "computer" is merely a question of semantics.
  - 2) With respect to claim 6, the Examiner notes that TV receivers typically received their TV signals from local TV stations that were "intermediate" to a major national network station. It would have been obvious to one of ordinary skill in the art for the TV signal in the modified system set forth above to have been received from the local station of such a typical TV network.
  - 3) With respect to claims 7 and 8, it is noted that the audio content of the audio portion of a TV programming, and hence the captioning portion thereof too, inherently functions to provide a verbal explanation of the programming.
  - 4) With respect to claims 11 and 12, it is noted that the teletext service is inherently provided via a digital data channel.

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- 5) With respect to claims 13-16, it is noted that the "reveal" code(s) of the prior represent "identifier(s)" [e.g. for example, they identify a time in the second medium (i.e., the TV programming signal) signal at which program related captions are to be displayed].
- 6) With respect to claims 17, it is noted that it was notoriously well known in the TV art to have recorded transmitted TV programming via a VCR to have allowed the transmitted programming to be reproduced at a time that is more convenient to the user. The Examiner maintains that it would have been obvious for the TV programming of the modified prior art to have been recorded at at least some of the receiver station in this notoriously well known fashion.
- 7) With respect to claims 18, it is noted that "cable" is a known and obvious way in which TV programming signals were transmitted to households from intermediate TV stations.
- E-52) Claims 20-23, 37-41, 67-72, and 85-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over the 1979 publication "The Concept of a Universal 'Teletext' (broadcast and interactive Videotex) Decoder, Microcomputer Based" by Marti in view of the notoriously well known Mode II Captioning feature of the ANTIOPE teletext standard as described in the 1981 "CBS/CCETT NORTH AMERICAN BROADCAST TELETEXT SPECIFICATION (EXTENDED ANTIOPE)" publication, for the same reasons that were set forth for claims 3-8 and 11-18 above. The following is noted:
  - 1) Each page of displayable Teletext data, including each page of caption data, inherently represents a series of instructions which must be executed by the teletext decoder in order to locally generate a corresponding displayable image [see paragraph C-3 of this Office action];
  - 2) In MODE II captioning, each the "reveal" codes represent a "control signal" which identifies content of the first TV signal medium (e.g. a timing content, an audio content, etc, ...), and which causes the instructions from a series of caption pages to be executed by the decoder (i.e. by the "computer" implemented decoder) so as to generate a corresponding series of caption images;

Wherein the caption images of MODE II captioning, by definition, are displayed over the video component of the TV signal with which it is "related" so as to create a combined multimedia (video/text/graphic/audio) presentation.

#### **Double Patenting:**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ormum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

E-53) Claims 2-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. #4,694,490. Although the conflicting claims are not identical, they are not patentably distinct from each for the following reasons:

The Examiner maintains that the meaning of the instant claims is confusing and is not immediately apparent due to the fact that the claims have been drafted using terms/recitations that are not supported by the instant specification as originally filed (SEE paragraph E-2 of this Office action). However, when one considers the claims in

light of the alleged section 112-1 support currently argued by Appellants' and their expert, their alleged meaning becomes more apparent. Specifically, in the response of 1/29/2003, Appellants' have alleged/indicated that claims 2-18 of the instant application are supported by the "Wall Street Week" processing/embodiments of both the 1981 and the instant 1987 CIP disclosures [SEE: Exhibit II and Tab "F" of the 1/29/2003 communication]. From these allegations, it is apparent that:

- a) The section 112 support for the recited "stored information of the first medium" of the instant claims is nothing more that the users locally stock portfolio information;
- b) The section 112 support for the recited "presentation using said information" of the instant claims is nothing more than the locally generated overlay showing how the users portfolio performed;
- c) The section 112 support for the recited "second medium" of the instant claims is nothing more than the "WALL Street Week" TV programming;
- d) The section 112 support for the recited "determination" of "content" of the "second medium" of the instant claims is nothing more than the detection of the "graphics-on" instruction signal which, because it occurs in synchronism with specific content of the TV programming, is allegedly used at the receiver station (via its detection) to "determine" the content of the "Wall Street Week" programming to which it is synchronized (i.e., specifically an audio content);
- e) The section 112 support for the recited "coordination" of presentation based on the detected content of the instant claims is nothing more that the process of overlaying the first presentation (i.e. the graphic showing the users portfolio performance) over the second presentation (the "Wall Street Week" programming) based on said determined "content" (i.e., which is, again, nothing more than the detected "graphics on" signal) to produce and output the "Multimedia" presentation (i.e. which is nothing more than the "combined" presentation).

When the alleged section 112 support for the limitation of instant claims 2-18 have been identified in this manner, it is becomes apparent that the instant claims have simply

adopted different language to recite/describe the same receiver side "Wall Street Week" overlay method/processing that has already been covered/recited via claims 1-13 of U.S. Patent #4,694,490 - note too that claims 9-13 of said US Patent appear to invoke a more comprehensive section 112 (paragraph 6) "means-plus-function" interpretation.

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E-54) Claims 20-30, 33-42, and 67-104 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. #4,694,490 for the same reasons that were set forth for claims 2-18 above.

E-55) The art of record has been applied to the claims to the extent of the Examiner's understanding given the section 112 problems which have been noted above.

# (10) Response to Argument

# Claim to Continuation-In-Part Priority

U.S. Patent Application Serial Number 08/487,526 (instant application) includes an identical specification to U.S. Patent Application Serial Number 07/096,096, filed September 11, 1987. Thus, it is indeed not disputed that the instantly claimed invention is entitled to an effective filing date of September 11, 1987 under 35 USC 120.

The crux of the matter pending before the Board of Patent Appeals and Interferences (hereinafter "BPAI") as it pertains to the priority right of the claimed subject matter as set forth in the Appellants' claimed appendix is straightforward:

Are the Appellants' entitled to claim alleged "common" subject matter purportedly disclosed in the 1981 specification and maintain an effective filing date of November 3, 1981 for such claims?

See Appellants' arguments provided in the Brief filed on March 7, 2005, pp. 10-26, as it pertains to the right of priority under 35 USC 120; see pp. 27-30 as it pertains to Appellant's arguments pertaining to the first two section of 35 USC 112.

The Appellants' application S.N. filed 07/096,097 filed 9/11/1987 has been designated a "CIP" by the Appellants. The question arises as to whether or not this application constitutes a "true" CIP/continuation:

- 1) Are the claims of the instant application reciting subject matter that is described in the CIP specification, and which same described/claimed subject matter was also previously described in the original 1981 parent specification too (e.g. that which was contained in S.N. 06/317,510); or, alternatively,
- 2) Are the claims reciting described 1987 CIP subject matter so changed by the "new matter" introduced via the filing of the 1987 CIP that the "substance" of the subject matter being claimed, e.g. the invention, has been changed.

These are not easy questions to answer given the way in which the Appellants elected to draft and file said CIP application S.N. 07/096,096 of 9/11/1987. That is:

- 1) The 557 pages of new text that comprises Appellants' instant 1987 CIP specification fail to incorporate the 44 pages of old text that comprised Appellants' 1981 parent specification either:
  - a) "By reference"; or
  - b) "Specifically"/physically in any immediately discernible fashion.

Therefor, it is not readily apparent from the instant 1987 CIP specification as to how much, if any, of the subject matter from the 1981 specification has been carried forward into the instant 1987 CIP specification;

2) Even when one assumes that at least some teachings from the 1981 parent specification were carried forward into the 1987 CIP specification, it is clear that such 1981 teachings have, beyond question, been extensively modified with new 1987 subject

matter. Appellants' themselves use terms such as "expanded", "enhanced", and "improved" to characterize such "modifications." To the extent that these modifications, i.e., the added new 1987 subject matter, has changed in the substance of the inventions described and claimed with respect to the 1987 specification, priority to 1981 effective filing date under section 120 has been lost.

Therefor, given the present state of affairs, one must not only determine exactly what it is that is now being claimed with respect to the 557 pages of the instant 1987 CIP specification but, to determine whether this recited subject matter is entitled to the 1981 effective filing date, one must then determined whether that which is now described and claimed with respect to the instant 1987 CIP specification was previously described, in accordance with all the same requirements of section 112, in the 1981 parent specification too (are the respective 1987 and 1981 descriptions "legal equivalents" with respect to that which is claimed). That is, one is now forced to judge whether the modified descriptions of the 1987 CIP specification alter the substance of that which is now claimed, with respect to that which was originally described in the 1981 specification, to a point where priority to the 1981 effective filing date is not permitted under section 120. That is, for each claim for which the 1981 effective filing date is sought, one is forced to consider whether it is subject matter from the 44 parent specification, carried forward into the 557 pages of the instant 1987 CIP specification, that is "solely" claimed (i.e., whether the claim is in fact reciting "common subject matter" described in both specifications).

For if Appellants' CIP application is not a "true" CIP application, then the claims thereof are, at best, only entitled to the 9/11/1987 original filing date of the 557 page CIP specification.

More to the point, however, the Examiner maintains that all continuation-in-part (CIP) applications are not, per se, "true" continuations. A true CIP application is one that describes and

claims subject matter previously described in an earlier filed co-pending application and, being such, the claims of a "true" CIP are entitled to the effective filing data of the parent application.

In contrast, applications that include the "CIP" designation but comprise claims having limitations directed to "new" subject matter that has been added via the filing of the alleged CIP application are not "true" continuations and, therefor, are not entitled to the earlier effective filing date. As set forth in *Reynolds Metals Company v. The Continental Group, Inc.*, (DC NIII), 210 USPQ 911 at 929:

Thus, if an application is, in fact, a *true* continuation application, it is entitled to the filing date of the original parent application. If, however, it discloses and claims subject matter not common to or not supported by the parent application, it is not a true continuation application and any claims therein that include new matter are only entitled to the actual filing date of the later-filed application, and not the earlier parent application. (Emphasis added)

Clearly, then, the "CIP" designation, itself, does not validate a claim for section 120 priority. That is, beyond the formal requirements, the CIP designation only indicates that insofar as the subject matter from the alleged parent application has actually been carried forward from the parent application into the CIP application; Appellants are entitled to the earlier filing date of the parent application for claims that are directed *solely* to the subject matter which has been carried forward (i.e., for claims that are directed to "common subject matter").

However, as mentioned earlier, a continuing application is entitled to rely on the earlier filing date of an earlier application only with respect to subject matter common to both applications. Transco Products, Inc., v. Performance Contracting, Inc., 32 USPQ2d 1077 (emphasis added).

Any claim in a continuation-in-part application that is directed <u>solely</u> to subject matter adequately disclosed under 35 U.S.C. 112 in the parent application is entitled to the filing date of the parent application." (Emphasis added).

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In Transco Products, Inc., v. Performance Contracting, Inc., 32 USPQ2d 1077.

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Section 120 merely provides mechanism whereby application becomes entitled to benefit of filing date of earlier application disclosing same subject matter; common subject matter must be disclosed in both applications, either specifically or by express incorporation by reference of prior disclosed subject matter. Dart Industries, Inc. v. Banner, Commissioner of Patents and Trademarks, (CA DC), 207 USPQ 273.

More important than what the CIP designation indicates, is what the CIP designation <u>does</u> not indicate:

- 1) The CIP designation is not an "Incorporation by Reference". To be entitled to section 120 priority, the subject matter that is to be claimed in the CIP application must be formally carried forward into the CIP from the earlier filed parent application. That is, the subject matter that is to be claimed must be carried forward into the CIP disclosure either by:
  - 1) A formal "Incorporation by Reference" of the subject matter that is to be carried forward from the parent; or
  - 2) "Specific" physical descriptions of said subject matter that is to be carried forward from the parent; and
- 2) "CIP" practice does not permit Appellants to add "new matter" which alters or expands the substance of the subject matter that was disclosed in the parent application, while preserving the earlier filing date of the parent application for claims in the CIP application that recite the altered/expanded subject matter of the CIP

It is noted that the Appellants are apparently confusing two distinctly different things:

- (1) The right to have benefit of the filing date of an earlier application under 120 for subject matter claimed in the later application because that subject matter is disclosed in an earlier application to which a specific reference is made i.e., a reference to the earlier application per se, and
- (2) The incorporation by reference in an application of matter elsewhere written down (not necessarily in a patent application), for economy, amplification, or clarity of exposition, by means of an incorporating statement clearly identifying the subject matter which is incorporated and where it is to be found. In re de Severersky, 177 USPQ 146 (CCPA 1973).

Moreover, as further noted in *In re de Severersky*, (id. at 146), a "statement in application that it is continuation-in-part of prior application is insufficient to incorporate therein any part of prior application; all that it means is that insofar as disclosure of application finds corresponding disclosure in prior application, the application is entitled to filing date of prior application."

Moreover, the following citations are considered pertinent to the right of priority (or lack thereof):

In 1967, the Court of Custom and Patent Appeals first separated a new written description (WD) requirement from the enablement requirement of [Section] 112. The reason for this new judge-made doctrine needs some explanation. Every patent system must have some provision to prevent Applicant's from using the amendment process to update their disclosures (claims or specification) during their pendency before the patent office. Otherwise Applicant's could add new matter to their disclosures and date them back to their original filing date, thus defeating accurate accounting of the priority of invention.

Enzo Biochem Inc. v. Gen-Probe Inc. 63 USPQ2d 1618,1624 (CA FC 2002)

"[Section 120] contains no magical disclosure -- augmenting powers able to pierce new matter barriers; therefor, it cannot "limit" absolute and express prohibitions against new matter contained in Section 251."

Dart Industries, Inc. v. Banner, Commissioner of Patents and Trademarks, (CA DC), 207 USPQ 273.

A continuation-in-part application is not entitled to the benefit of the earlier filing date of its parent application where the changes included within subsequent applications are 'new matter' which either alters the substance of the invention or makes the composition an invention for the first time.

Indiana General Corp. v. Krystinel Corp., 161 USPQ 82, 94-95.

To the extent that a CIP application adds new matter, claims that are dependent upon the new matter are entitled to the filing date of the CIP only and not that of the parent application.

Stern v. Superior Distributing Company et al., (CA 6), 215 USPQ 1089 at 1094.

Unlike the enablement provision of section 112, where the disclosure of a single species might be sufficient to enable a practitioner skilled in the art to make and use any member of the genus, ..., the written description requirement of section 112 requires more ... This strict reading of the written description requirement

prevents an inventor from surreptitiously expanding a patent through successive continuation-in-parts. See id. At 1562. Essentially, it limits the claims of an Applicant' to those inventions he clearly discloses, either expressly or inherently. (Emphasis added). Tronzo v. Biomet Inc. (DC SFla) 41 USPQ2d 1403 citing Vas-Cath Inc. v. Mahurkar (CA FC) 19 USPQ2d 1111.

## **Appellants' Chain of Pendency:**

- a) On 11/03/1981, Appellants filed US Patent application S.N. 06/317,510 that eventually matured into US Patent #4,694,490. The 1981 specification of this originally filed parent application contained a written description that comprised 44 pages of text and related figures. On 2/14/1986, first continuation application S.N. 06/829,531 was filed which comprised the same 1981 parent specification.
- b) On 9/11/1987, Appellants filed CIP application S.N. 07/096,096 that eventually matured into US patent #4,965,825. The specification of this 1987 CIP application contained a written description that comprised 557 pages of text and related figures. A chain of four continuation applications (i.e. 07/588,126, 07/849,226, 08/056,501, and 08/113,329) was then filed from this 1987 CIP application all of which comprised the same 1987 CIP specification.
- c) The instant application, and the 327 related bulk filed applications, were all filed as continuations of S.N. 08/113,329 and comprises the same 557 page 1987 CIP specification. For some of these applications (i.e., all claims contained therein), Appellants have alleged the 1987 effective filing date of the 557 page CIP application, whereas for the remaining ones of these applications (i.e. all claims contained therein) Appellants have alleged the 1981 effective filing date of the original 44 page parent application.

#### The Earlier Effective Filing Dates that are Alleged Under Section 120:

## 1) The 1987 effective filing date:

As is evident from the chain of pendency cited above, the 557 page specification of the instant application is the same as the 557 page specification of the 1987 CIP application. Being such, to obtain the 1987 effective filing date, Appellants need only show that the claims of the instant application are supported under section 112 by the 557 pages of this instant 1987 CIP specification.

## 2) The 1981 effective filing date:

If Appellants had incorporated the 44 page 1981 parent specification into the 557 pages of the instant 1987 CIP specification either via an "incorporation by reference" or "specifically"/physically in some immediately discernible fashion, then the process of obtaining the 1981 effective filing date for that which is now claimed would have been simple indeed. Appellants would only have had to draft the instant claims solely to the subject matter of the 1981 parent specification.

Appellants, however, elected not to incorporate the 1981 specification into the instant 1987 specification either "by reference" or "specifically"/physically thereby, as discussed above, making the process of obtaining the 1981 effective filing date significantly more arduous.

To obtain the 1981 effective filing date for that which is now claimed, given the current fact pattern, Appellants must be able to reach back to the 1981 parent specification (and subject matter) by way of the instant 1987 CIP specification. That is, Appellants must be able to show that the claim construction that results when a given claim is construed under section 112 by the descriptions of the instant 1987 CIP specification, is the same/equivalent claim construction that would have resulted had the same claim been construed under section 112 by the descriptions of the discarded 1981 parent specification; i.e., that the respective 1987 and 1981 descriptions of the claimed subject matter are legal equivalents. Stated another way, Appellants must be able to show that the claims of the instant CIP specification are directed *solely* to "common subject matter" found in both specifications; i.e., that the "claimed subject matter" that is

described by the 557 pages of the instant 1987 CIP application in accordance with all of the requirements of section 112 was previously described by the 44 pages of the discarded 1981 parent specification. Stated a third way, Appellants must be able to show that the instant application and claims effectively constitutes a "true" CIP application with respect to the 1981 parent application.

"[The] bottom line is that, no matter what term is used to describe a continuing application, that application is entitled to the benefit of the filing date of an earlier application only as to common subject matter."

Transpage Products Inc. v. Performance Contracting Inc. (CA EC) 32 USPO24

Transco Products Inc. v. Performance Contracting Inc. (CA FC) 32 USPQ2d 1077.

A continuation-in-part application is not entitled to the benefit of the earlier filing date of its parent application where the changes included within subsequent applications are 'new matter' which either alters the substance of the invention or makes the composition an invention for the first time.

Indiana General Corp. v. Krystinel Corp., 161 USPQ 82, 94-95.

The question in cases in which the parent application does *not* contain language contained in the claims of the later application is whether the language which *is* contained in the parent application is the legal equivalent of the claim language, in the sense that the 'necessary and only reasonable construction to be given the disclosure [in the parent application] by one skilled in the art' ... is the same as the construction which such person would give language in claims of the later application.

Wagoner and Protzman v. Barger and Haggerty, 175 USPQ 85, 86 (CCPA 1972).

## Appellants' position concerning the "Dual" section 112 support:

Presently, the Examiner and Appellants are in agreement that, in order for a given claim to be entitled to the 1981 effective filing date, Appellants' must be able to show that *some kind* of "dual" 1987 and 1981 section 112 support exists in the respective 1987 and 1981 disclosures for the given claim. The Examiner and Appellants, however,

continue to disagree as to what this "dual" section 112 support must comprise.

Specifically:

1) Appellants continue to take the position that the respective 1981 and 1987 disclosures may indeed describe proverbial "apples and oranges," respectively, yet the claims of the CIP application may still be entitled to section 120 priority provided that a broad "quasi-generic" claim can be drafted which independently reads on (i.e., is independently "anticipated" by) the proverbial "apples" and the "oranges" of the respective applications. That is, Appellants allege that:

[Section] 120 does not require an Applicant' to demonstrate that the disclosures relied upon under '120 have anything in common besides their ability to separately comply with '112-1 with respect to the claims for which priority is sought. Accordingly, the Examiner's focus on comparing the support from the two applications for similarity or common subject matter is improper and irrelevant because all Applicant's are required to do is satisfy 120 is show that each disclosure meets the requirements of '112-1 for a given claim." (Emphasis added.)
[See page 141 of Appellants' response filed on 1/28/2002 in application S.N. 08/470,571].

Accordingly, the law requires a two part test in which the Applicant' separately demonstrates 112 support for each application. In the FOA, the Examiner distorts this straightforward test by imposing a third element of the test whereby the 112 support from each application consists of "common subject matter."

[See the last 10 lines on page 137 of the response filed on 1/28/2002 in SN 08/470,571].

2) In contrast, the Examiner maintains that section 112 support must come from "common subject matter" (i.e. the "same invention") described in both specifications such that the respective claim constructions that result when a given claim is construed in light of the respective disclosures is the same/equivalent; i.e.

However, as mentioned earlier, a continuing application is entitled to rely on the earlier filing date of an earlier application only with respect to subject matter common to both applications. (Emphasis added.) In *Transco Products, Inc.*, v. *Performance Contracting, Inc.*, 32 USPQ2d 1077.

The inquiry required by section 120 demands a comparison of 1) the claims of the parent and CIP applications and 2) any other disclosures

made in the applications such as specification and drawing. Acme Highway, supra, at 1079, 167, USPQ at 132-33. Stern v. Superior Distributing Company et al., (CA 6), 215 USPQ 1089 at 1094.

Clearly, Appellants' position that the respective parent and CIP disclosures, "need not have anything in common besides their ability to separately comply with 112-1 with respect to the claims for which priority is sought," permits and invites multiple claim constructions to exist for each claim in question; i.e.

- a) A first construction that results when the claim is construed under section 112 in light of first subject matter that is described in the child/CIP specification; and
- b) A second different construction that exists when the same claim is "separately" construed under section 112 in light of different subject matter that was previously described in the parent specification.

The Examiner maintains that it is improper for multiple claim constructions to exist for a given claim within a patent application. Hence, the Examiner maintains that Appellants' belief that "common subject matter" is irrelevant to the section 120 priority issue seems both erroneous and flawed. Some hypothetical examples will be discussed in the following section of this Office action for the purpose demonstrating this point.

Can an Appellants' use a broad "quasi-generic" claim within an alleged CIP application as a license for effecting wholesale changes to the written description (and the subject matter described therein) while maintaining priority to an earlier filing date under Section 120?

Appellants' positions concerning the use of "dual" section 112 support under section 120 seem to say: "YES".

The following hypothetical fact patterns are presented to illustrate why the Examiner believes the answer to be: "NO."

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### A) Hypothetical situation #1:

a) An Applicant files a first application that ONLY discloses a bicycle. In this first application, the Applicant presents a first claim for a "multi-wheeled cycle".

- b) Three years into the prosecution of the first application, the same Applicant becomes aware of someone who invented the tricycle.
- c) At this point, the Applicant files a second application that **ONLY** discloses the tricycle (it does not disclose the bicycle of the first application). Applicant alleges that this second application is "CIP" of the first application. Applicant then transfers the "multi-wheeled cycle" claim from the first application into this second application and claims priority for the transferred claim, under section 120, back to the first application. Applicant then abandons the first application.

# Is the transferred claim of the second application entitled to the earlier filing date of the first application under section 120?

- 1) Clearly, the answer would have been "yes" had the disclosure of "the bicycle" from the first application actually been carried forward into the disclosure of the second application being that the claim could have been legitimately supported by "common subject matter" from both applications (i.e. specifically, by the disclosed bicycle of both applications).
- 2) However, under the circumstances cited above, i.e. wherein the disclosure of the first application was *discarded* and not carried forward into the second application, the case for priority under section 120 seems less than clear. Namely:
  - a) When the "multi-wheeled cycle" claim was first presented in the first application it was supported under section 112 only by the disclosure of the bicycle found in the first application. The section 112 support for "multi-wheeled cycle" was "bicycle". Note that the "multi-wheeled cycle" limitation broadly recites the "bicycle" being that the instant written description must describe the invention that is claimed. Most likely (but not necessarily), a fair reading of the "multi-wheeled cycle" claim would have included tricycles too.

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b) However, when said "multi-wheeled cycle" claim was transferred into the second application, it was now supported under section 112 only by the disclosure of the tricycle found in the second application - i.e. being that the bicycle disclosure of the first application was not carried forward into the second application. The section 112 support for "multi-wheeled cycle" was now "tricycle". Now, the new "multi-wheeled vehicle" limitation now broadly recites the "tricycle" being that the instant written description must describe the invention that is claimed. Thus, a fair reading of this same claim now necessarily (not just "most likely") includes the tricycle.

Thus, if priority under section 120 is accepted, then via the filing of the alleged CIP, it appears that Applicant has effectively put everyone on notice (via the new <u>disclosure</u> of the CIP) that he invented the tricycle at the time he actually invented the bicycle. Can this be right/proper?

In Vas-Cath Inc. v. Mahurkar (CA FC) 19 USPQ2d 1111, 1114, it was noted that one might be inclined to question the purpose of a separate written description requirement of section 112 in view that "the invention" is in fact the subject matter that is defined by the claims being considered:

One may wonder what purpose a separate "written description" requirement serves, when the second paragraph of '112 expressly requires that the applicant conclude his specification 'with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Reasons for having the separate descriptive requirement, as noted in *In Vas-Cath Inc. v. Mahurkar* (CA FC) 19 USPQ2d 1111, 1115, included the following:

- 1) An adequate written description of the invention provides a "warning an innocent purchaser, or other person using a machine, of his infringement of the patent; and at the same time taking from the inventor the means of practicing upon the credulity or fears of other persons, by pretending that his invention is more than what it really is, or different from its ostensible objects, that the patentee is required to distinguish his invention in his specification"; and
- 2) An adequate written description of the invention "guards against the inventor's overreaching by insisting that he recount his invention in such detail that his future claims can be determined to be encompassed within his original creation." [Vas-Cath Inc. V. Mahurkar (CA FC) 19 USPQ2d 1115]

#### B) Hypothetical situation #2:

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a) An Applicant files a first application that **ONLY** discloses a bicycle. In this first application, the Applicant presents a first claim for a "multi-wheeled vehicle."

b) Three years into the prosecution of the first application, this Applicant becomes aware of someone who invented the tricycle.

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- c) At this point, Applicant files a second application that **ONLY** discloses the tricycle (it does not disclose the bicycle of the first application). Applicant alleges that this second application is "CIP" of the first application. Applicant then transfers the "multi-wheeled vehicle" claim from the first application into this second application and claims priority for the transferred claim, under section 120, back to the first application. Applicant then abandons the first application.
- d) Two years into the prosecution of the CIP application, Applicant becomes aware of someone who invented the automobile.
- e) At this point, Applicant files a third application that **ONLY** discloses the automobile (it does not disclose the bicycle of the first application or the tricycle from the second application). Applicant alleges that this third application is "CIP" of the second application that is a CIP of the first. Applicant then transfers the "multi-wheeled vehicle" claim from the second application into the third application. Applicant then abandons the second application.

# Is the claim in this third application entitled to the earlier filing date of the first application under section 120?

- a) When the "multi-wheeled vehicle" claim was first presented in the first application it was supported under section 112 only by the disclosure of the bicycle found in the first application. The section 112 support for "multi-wheeled vehicle" was "bicycle." The "multi-wheeled vehicle" limitation broadly recites the "bicycle" being that the instant written description must describe the invention that is claimed.
- b) When the "multi-wheeled vehicle" claim was transferred to the second application it was then supported under section 112 only by the disclosure of the tricycle found in the second application. The section 112 support for "multi-wheeled vehicle" was then "tricycle." The "multi-wheeled vehicle" limitation broadly recites the "tricycle" being that the instant written description must describe the invention that is claimed.
- c) Now that the "multi-wheeled vehicle" claim has been transferred to the third application it is now supported under section 112 only by the disclosure of the automobile found in the second application. The section 112 support for "multi-wheeled vehicle" is now "automobile." The "multi-wheeled vehicle" limitation broadly

recites the "automobile" being that the instant written description must describe the invention that is claimed.

Thus, if priority under section 120 is accepted back to the first application, then via the filing of two alleged CIP applications, Applicant has effectively put everyone on notice (via the <u>disclosure</u> of the second CIP) that he invented the automobile at the time he actually invented the bicycle. Can this be right/proper?

- 1) Clearly, the answer might have been "yes" had the disclosure of "the bicycle" from the first application actually been carried forward into the disclosures of the second and third applications being that the claim could have been legitimately supported by "common subject matter" found in all three applications of the chain (i.e. said disclosed bicycle).
- 2) The answer is also "yes" when one adopts Appellants' position that, to obtain section 120 priority, one needs only shown that each application provides some kind of section 112 support for the claim regardless of whether the section 112 support provided by each application is similar or not. However, Appellants' position seems flawed because it appears to confuse the section 112 requirements of section 120 with the "anticipation" standard section 102. That is, while the "multi-wheeled vehicle" claim is arguably "anticipated" in accordance with section 102 by the "bicycle" of the first application, by the "tricycle" of the second application, and by the "automobile" of the third application, the claim construction for the "multi-wheeled vehicle" limitation (i.e., the section 112 support for the claim) has clearly morphed during its travel from the first application through the second CIP application and to the third CIP application:
  - a) The claim construction (i.e. the section 112 support) was "bicycle" when the claim was originally presented in the first application;
  - b) The claim construction (i.e. the section 112 support) was morphed to "tricycle" when the claim was transferred to the second application; and
  - c) The claim construction (i.e. the section 112 support) was morphed to "automobile" when the claim finally landed in the third application.

That is, the claim construction (i.e. section 112 support) for the "multi-wheeled vehicle" claim in the third application is an "automobile." Being that this claim construction (i.e., section 112 support) was not provided by either of the first and second applications it is the Examiner's understanding that this claim (i.e., its construction) is not entitled to section 120 priority back to either the first or second application; i.e. despite Appellants' position to the

contrary. That is, while both descriptions provide respective 112-1 support for the claims, the respective descriptions/constructions do not appear to be legal equivalents.

To accept such an allegation of section 120 priority seems to confuse the issue of "anticipation" under section 102 with the requirements of Section 112 that have been literally incorporated into Section 120. That is, to be entitled to section 120 priority, the Section 112 support that is provided by the respective specifications of the continuing applications must be for the "same invention" (regardless of wording); i.e. the respective descriptions must be legal equivalents with respect to that which is claimed.

It is clearly unreasonable for Appellants to suggest that the section 120 issue being raised by the Examiner is the result of mere differences in "wording" between the 1981 descriptions of the discarded 1981 parent specification and the 1987 descriptions of the instant 1987 CIP specification - as Appellants apparently would like to have one believe [SEE: lines 4-9 on page 41 of the Response filed 1/9/2003 in 08/470,571]. Evidence of this is found in the fact that Appellants have been unable to cite respective 1981 and 1987 descriptions in support of the claims that are the same/equivalent except for their wording. To the contrary, in all cases presented thus far, Appellants have ultimately been forced to argue that the cited 1981 and 1987 descriptions are "equivalent" when one overlooks and ignores the improved/enhanced/expanded 1987 SPAM subject matter that comprises the described "present invention" of the instant 1987 CIP specification.

However, what is Appellants' basis and justification for ignoring and discarding the new 1987 CIP descriptions when constructing the instant claims? Can Appellants properly use the <u>discarded</u> 1981 specification to squeeze <u>discarded</u> 1981 subject matter from the new

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1987 CIP SPAM subject matter that is actually described in the instant 1987 CIP specification? Can Appellants properly use broadly drafted "quasi-generic" claims as the tool to allege that only <u>discarded</u> 1981 subject matter from the <u>discarded</u> 1981 specification is being claimed when, in fact, the section 112 support for the claims necessarily comes from the new 1987 CIP SPAM subject matter that is (by definition) the "present invention" of the instant 1987 CIP specification?

# While different, the fact pattern of the instant application has some significant similarities to the hypothetical examples discussed above:

- A) First, like the hypothetical examples cited above, current Appellants have literally discarded the specification of their 1981 parent application at the time they drafted and filed the instant 1987 CIP disclosure. That is, the written description of the 1981 parent specification was replaced by the new 1987 written description of the instant 1987 CIP specification; i.e., being that Appellants elected not to carry forward (i.e., formally incorporate) 1981 specification therein. More to the point, like the hypothetical examples cited above, via the filing of an alleged CIP application, the current Appellants have effectively replaced the description of 1981 apparatus, 1981 methods, and 1981 signaling of the 1981 parent specification with "expanded"/"enhanced"/"improved" descriptions of the 1987 "SPAM" apparatus, 1987 "SPAM" methods, and 1981 "SPAM" signaling that comprise the "present invention" of the instant 1987 CIP specification. Note:
  - 1) Appellants have acknowledged that the description of inventions that is provided by the <u>557 pages</u> of their instant 1987 CIP specification is different than the description of inventions that was provided by the <u>44 pages</u> of their original 1981 parent specification. This acknowledged difference comes as no surprise being that:
    - a) The 1987 written description of the instant 1987 CIP specification is more that 510 pages longer than, and more than 12 times the length of, the 44 page written description of the 1981 parent. Clearly, at best, a substantial amount of new 1987 subject matter has unquestionably been added via the filing of the instant 1987 CIP; and
    - b) The 1987 description of the instant 1987 CIP is entirely "new" in the sense that the written description of the 1981 parent specification was neither

incorporated into the 1987 CIP specification "by reference" nor was it incorporated into the 1987 CIP specification in any immediately discernible fashion. This makes it extremely difficult to determine exactly how much of the 1981 subject matter, if any, was carried forward into the specification of the 1987 CIP in a way that does not constitute "New Matter."

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In fact, Appellants themselves have used terms such as "expanded", "enhanced", and "improved" to characterize the content of the "new" 1987 descriptions of the 1987 CIP when compared to the content of the past 1981 descriptions of the <u>discarded</u> 1981 parent specification.

Note that the term "discarded" accurately describes the present situation because of Appellants' choice not to, or failure to, incorporate the past 1981 specification into the instant 1987 CIP specification "by reference," or in any unmodified, unenhanced, unexpanded, and unimproved way whatsoever. That is, the 1981 parent specification is not part of the "instant 1987 CIP specification" due to the lack of formal/proper incorporation therein; i.e., the past 1981 parent specification itself having therefor been "discarded" in favor of the new 1987 CIP specification. The result being that the new 1987 CIP specification stands alone as the "instant specification" upon which any and all section 112 issues must be judged.

2) The 1987 "SPAM" acronym was specifically coined by, and used throughout, the instant 1987 CIP specification to refer to the:

"Signal Processing Apparatus and Methods of the present invention" (emphasis added) [e.g., note page 40 of the instant 1987 CIP specification]

This "SPAM" acronym provides clear evidence that the "present invention" described in the instant 1987 CIP specification was, by definition, the expanded/enhanced/improved 1987 SPAM signal processing apparatus and methods described therein.

Moreover, within the instant 1987 CIP specification, the auxiliary signaling that was conveyed by the 1987 "SPAM" apparatus and methods was explicitly identified as being "SPAM" signaling; i.e. the described "signals" of the "Signal Processing Apparatus and Methods of the present invention" of the 1987 CIP. These "SPAM signals" were described by the 1987 CIP as having comprised the sophisticated signal packet structure that is shown in figures 2E-2K of the instant 1987 CIP specification. No such sophisticated packet structure was ever shown or described with respect to the auxiliary signaling found in the discarded 1981 parent specification. Being such, the 1987 SPAM signaling represents a significant difference between the instant and discarded specifications in that it was the introduction of this sophisticated 1987 SPAM signal packet structure into the 1987 CIP which provided a transport mechanism by which the expanded/enhanced/improved 1987 SPAM apparatus and methods of the 1987 CIP specification were enabled to carry complex control and instruction information including, most significantly, "computer software." That is, it was the sophisticated packet structure of the 1987 SPAM signaling which provided the mechanism by which large sequences computer software code could be downloaded from an upstream transmitter location to a plurality of receiver locations; i.e., a feature that was not described nor provided for within the 1981 systems and methods of the discarded 1981 parent specification - despite Appellants' allegation to the contrary [SEE: Appendix IV attached to Office action made FINAL (mailed April 28, 2004). Also Note: Appendix III and Appendix V attached in the Office action made FINAL (mailed April 28, 2004).

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B) Thus, as with the hypothetical examples cited above, via the filing of the instant 1987 CIP application and a claim for section 120 priority back to a discarded 1981 parent specification, it seems that Appellants are effectively putting everyone on notice (via the expanded/enhanced/improved disclosures of the instant 1987 CIP) that they invented the 1987 SPAM apparatus/methods/signaling of the instant 1987 CIP specification at the time they actually invented lesser 1981 methods/apparatus/signaling of the discarded 1981 parent specification. That is:

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- 1) By discarding the 1981 parent specification via the filing of the 1987 CIP specification, Appellants literally force the instant claims to be "constructed"/construed in the context of the new expanded/enhanced/improved 1987 SPAM apparatus/methods/signaling that comprise the "present invention" of the instant 1987 CIP specification (being that the instant specification from which all section 112 support must be derived is the instant 1987 CIP specification alone); while
- 2) By claiming section 120 priority for these required 1987 claim "constructions", Appellants effectively obtain an earlier 1981 filing date for these 1987 claim "constructions" (Being that the discarded 1981 parent specification did not disclose the 1987 SPAM apparatus/methods/signaling and therefor does not provide section 112 support for the same 1987 CIP claim constructions).

If permitted, such a process can improperly bestow real and significant advantages on Appellants who file CIP applications in this fashion. It would enable an Applicant to use CIP practice to enhance/improve/expand the way in which a given "quasi-generic" claim must be construed without loss of filing date.

Something is amiss. Clearly, priority under section 120 was provided as a way for preserving property rights and not as a way for going back retroactively and "expanding", "enhancing", and "improving" upon existing rights via one or more subsequently filed enhanced/improved/expanded CIP disclosures.

C) On pages 47 and 48 of the response filed 1/29/2003 in 08/487,526 Appellants state the following:

Applicant's acknowledge that the 1987 disclosure contains numerous improvements and enhancements of the 1981 disclosure. Not withstanding this fact, as long as each of Applicants' inventions claimed in the instant application is described adequately in both specifications, the test under [section] 120 is met.

The Examiner agrees in part. The Examiner notes, however, that the respective section 112 support for that which is claimed (the description requirement, the enablement requirement, and the best mode requirement) must be to the "same invention"; the requirements of section 112-1 of section 120 must not be confused with "anticipation" under section 102.

If Applicant's attempt to include limitations of the improvement and enhancements from the 1987 specification in a given claim, that claim *could not* receive priority under [section] 120 because the claim could not be supported under [section] 112 by the subject matter disclosed in the 1981 specification." <u>Id</u>. [Emphasis added.]

The Examiner agrees with this statement noting that "could not" actually means "should not," or "could not legally."

This does not mean, however, that Applicant' cannot rely on passages from the 1987 specification that include those improvements and enhancements to support a claim that does not include those improvements and enhancements. The question is whether or not the provided 1987 support <u>describes the more basic inventions being claimed</u>, regardless of whatever else those passages may <u>also describe</u>" <u>Id.</u> (emphasis added)

Clearly, under section 112, the instant 1987 CIP specification must describe "the inventions" being claimed. If there are in fact passages (or portions thereof) within the instant 1987 CIP specification that actually describe Appellants' alleged "more basic inventions," as is clearly implied by Appellants' argument, then why do Appellants not specifically cite the teaching of "the more basic inventions" as being the required section 112 support for that which is claimed. How can Appellants cite passages that describe enhanced/improved/expanded 1987 subject matter to support the claims' limitations under section 112, and then turn around and argue that the claims are really directed to a

"more basic" invention that is, allegedly, embedded somewhere within the cited passages to obtain an earlier effective filing date for that which is claimed. How do Appellants propose one (e.g., a member of the public or an Examiner) discern the "more basic inventions" that are allegedly being claimed from the expanded/enhanced/improved inventions that are actually described in the instant 1987 CIP specification when, during the course of prosecution, Appellants themselves have explicitly cited this enhanced/improved/expanded 1987 subject matter as being the section 112 support for that which is claimed. In reality, is it not the expanded/enhanced/improved 1987 subject matter that is really being claimed, albeit broadly, as opposed to the 1981 inventions which were discarded along with the 1981 specification?

Again, do Appellants believe that multiple claim constructions can properly exist for each of the claims in question?

- a) That there can be a first 1987 claim construction that results when a claim's limitations are *fully* construed in light of the enhanced/improved/expanded 1987 SPAM subject matter of "present invention" that is actually described by the <u>instant</u> 1987 CIP specification; and, at the same time,
- b) A second "more basic" claim construction that results when the claim's limitations are *less than fully* construed in light of alleged "more basic" teachings which Appellants attempts to selectively carve/infer from the <u>cited</u> enhanced/improved/expanded 1987 CIP teachings by suggesting that the enhancements/improvements/expansions that comprise the descriptions of the instant 1987 specification simply be discounted and ignored, even though it is this un-carved enhanced/improved/expanded 1987 CIP subject matter that Appellants explicitly cite as being the section 112 support for that which is claimed. That is, under section 112, Appellants seem to indicate that they are in fact claiming the enhanced/improved/expanded 1987 subject matter, being that it is enhanced/improved/expanded 1987 subject matter that is explicitly cited by Appellants as being the required section 112 support for that which is claimed. In contrast, under section 120, Appellants seem to argue/"pledge" that the claims are only directed to that portion of this cited enhanced/improved/expanded 1987 subject matter that allegedly corresponds to lesser 1981

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apparatus/methods/signaling that were described in the <u>discarded</u> 1981 parent specification. The problem is, however, that the instant 1987 CIP specification does not support Appellants' argument/"pledge" made under section 120 that the claims should be constructed/construed as being directed to the lesser 1981 subject matter of the discarded 1981 specification being that this lesser 1981 subject matter was not carried forward into the instant 1987 CIP specification in any immediately discernible fashion (nor in a way that does not incorporate prohibited "new matter").

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To the contrary, the Examiner maintains that only one claim construction can properly exist for each claim in question, and that is the one that results when the claim is fully construed in light of the entire enhanced/improved/expanded written descriptions that comprise the *instant* 1987 CIP specification from which the instant claims necessarily derive their required section 112 support. If and only if, for each claim in question, its one proper claim construction finds "equivalent" section 112 support in the discarded 1981 parent specification too, e.g. if it in fact the claim recites "common subject matter", is the claim entitled to the earlier 1981 filing date of the discarded 1981 parent specification under section 120. The respective 1981 and 1987 CIP description must be legal equivalents and must describe the same invention for priority under section 120.

## "Pledge" Theory:

- A) Appellants' allegation, under section 120, that certain ones of the 328 bulk filed applications (i.e. the claims contained therein) are entitled to the 1981 effective filing date could be proven, where/when necessary, if Appellants were to:
  - 1) Specifically identify the "common subject matter" that allegedly exists within both the instant 1987 CIP specification and the *discarded* 1981 parent specification;

- 2) Draft the claims to be specifically directed to this identified "common subject matter"; and
- 3) Submit arguments indicating that the drafted claims are to be constructed and construed based on so identified "common subject matter."
- B) However, in contrast to this approach, Appellants seem to summit conflicting arguments. Namely, Appellants have and continue to:
  - 1) Submit arguments, when dealing with section 112 issues, taking the position that the claims must be constructed/construed in light of <u>all</u> the 1987 subject matter that is contained throughout the 557 pages of the instant 1987 CIP disclosure and, therefor, should not constructed/construed as being directed to the specific passages of the 1987 CIP specification that have been cited by Appellants in support of the claims for, according to Appellants' arguments, these passages have only been cited as "exemplifying" one of the many ways in which the claims allegedly find section 112 support by descriptions found throughout the 557 pages of the instant 1987 CIP disclosure; and, in contrast,
  - 2) Submit arguments, when dealing with the 1981 section 120 priority issue, taking the position that the claims should not be construed/constructed in light of all the subject matter that is described in the 557 page instant 1987 CIP disclosure, but rather that the claims should be construed/constructed in light of alleged "more basic inventions" that supposedly exist buried somewhere within the enhanced/expanded/improved subject matter that is actually described by the specific passages of the 1987 CIP disclosure cited by the Appellants.

"Applicant's acknowledge that the 1987 disclosure contains numerous improvements and enhancements of the 1981 disclosure. Not withstanding this fact, as long as each of Applicants' inventions claimed in the instant application is described adequately in both specifications, the test under [section] 120 is met ... If Applicant's attempt to include limitations of the improvement and enhancements from the 1987 specification in a given claim, that claim could not receive priority under [section] 120 because the claim could not be supported under [section] 112 by the subject matter disclosed in the 1981 specification ... This does not mean, however, that Applicant' cannot rely on passages from the 1987 specification that include those improvements and enhancements to support a claim that does not include those improvements and enhancements ... The question is whether or not the provided 1987 support describes the more basic inventions being claimed, regardless of whatever else those passages may also describe" (emphasis added)

[pages 47 and 48 of the Response filed 1/29/2003 in S.N. 08/487,526]

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C) Appellants' contrasting arguments seems to indicate that Appellants believe it proper for a given claim of a patent application to have multiple "constructions"; i.e. a first "all encompassing" construction that occurs when the claim is construed in light of the entire 1987 CIP specification (i.e. the "standard" argued by Appellants when addressing section 112 support issues); and a second "more basic" construction that is limited to "more basic inventions" (i.e. the "standard" argued by Appellants when addressing 1981 section 120 priority issues). Accepting this multiple claim construction argument seems to permit a process in which an Applicant can draft claims which must necessarily be constructed/construed in light of "new subject matter" of a CIP application and yet, at the same time, permitting the so construed/constructed claims to capture the earlier effective filing date of a parent application which did not include the same or equivalent descriptions of this new CIP subject matter.

The Examiner does not believe that such a process is permitted under Section 112-1 as incorporated into Section 120. As understood by the Examiner, Appellants' instant claims must be given the "all encompassing" 1987 construction as provided by the entire instant 1987 CIP specification [unless, perhaps, Appellants were to submit arguments indicating otherwise (i.e. arguments which limit the way in which the claim are constructed/construed to specifically identified "common subject matter")]. The Examiner maintains that the instant claims are entitled to the 1981 filing date only if/when Appellants can show that this all encompassing 1987 construction finds the same/equivalent all encompassing construction in the 1981 parent specification too.

## "Smudge" Theory:

During the present prosecution, the Examiner noted that any claim which recites even the smallest amount of "new matter" from the instant 1987 CIP specification is, at

best, only entitled to the 1987 effective filing date of the CIP application which first introduced this "new matter"; e.g.

"Why should a pending claim having limitations that are directed to even a smudge of new 1987 subject matter be entitled to the earlier 1981 filing date of the Parent specification which did not disclose that smudge of new subject matter?"

The Examiner finds nothing controversial in this stated position. Yet, on pages 29 and 30 of the response filed 1/9/2003 in 08/470,571, Appellants feel the need to refute the Examiner's position (as stated). However, elsewhere within the same response, e.g., the sentence that begins in the last two lines on page 42, Appellants affirm the Examiner's position in their own words.

"If Applicant's attempt to include limitations of the improvement and enhancements from the 1987 specification in a given claim, that claim could not receive priority under [section] 120 because the claim could not be supported under [section] 112 by the subject matter disclosed in the 1981 specification." (emphasis added)

For the sake of argument, the Examiner accepts and hereby adopts Appellants' wording of this issue. It is noted, however, that there is no way for the Examiner to formally reject a claim under section 112-1 based on the 1981 disclosure being that the instant disclosure is the instant 1987 CIP specification, and not the *discarded* 1981 specification. Thus, within Appellants' cited statement, it seems more accurate if the phrase "that claim **could** not receive" where changed to read --that claim **should** not receive" (i.e., if Appellants' claim to the 1981 effective filing date was accepted, and if Appellants' claim to the 1981 date was erroneous/flawed, then the claim "would" receive

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priority under section 120 during prosecution when, in reality, said claim "should" not have received priority).

#### REAL CHANGES IN THE SUBSTANCE OF THE WRITTEN DESCRIPTION:

**B-1)** As noted above all CIP applications are not "true" CIP applications. That is, if the CIP application introduces "NEW MATTER" which alters the substance of the invention *being claimed*, then the CIP is not a true continuation and claims which recite such altered subject matter are <u>not</u> entitled to the effective filing date of the parent under section 120.

A continuation-in-part application is not entitled to the benefit of the earlier filing date of its parent application where the changes included within subsequent applications are 'new matter' which either alters the substance of the invention or makes the composition an invention for the first time.

Indiana General Corp. v. Krystinel Corp., 161 USPQ 82, 94-95.

After all, one is not allowed to use CIP practice as a vehicle to expand the substance of the invention without the loss of effective filing date.

Unlike the enablement provision of section 112, where the disclosure of a single species might be sufficient to enable a practitioner skilled in the art to make and use any member of the genus ... the written description requirement of section 112 requires more. See Vas - Cath, supra. This strict reading of the written description requirement prevents an inventor from surreptitiously expanding a patent through successive continuation-in-parts. See id. At 1562. Essentially, it limits the claims of an Applicant' to those inventions he clearly discloses, either expressly or inherently. (Emphasis added)

Tronzo v. Biomet Inc. (DC SFla) 41 USPQ2d 1403 citing Vas-Cath Inc. v. Mahurkar (CA FC) 19 USPQ2d 1111.

QUESTION: Has the "NEW MATTER" that has been introduced by the "expanded", "enhanced" and "improved" descriptions of Appellants' 557 page 1987 CIP disclosure changed the "substance" of the claimed invention?

**B-2)** Obviously, the answer to this question:

- a) Can only be answered, specifically, on a claim by claim being that section 120 priority pertains to the *claimed* invention; and
- b) Needs only be addressed/considered when priority to the earlier filing date is actually needed to overcome applied intervening prior art; i.e. the issue is moot when valid intervening prior art has not been applied against the claim.
- B-3) Certainly, however, changes to the "substance" of that which is described by written description have been effected at all levels of the disclosure via the "new matter" that has been introduced by the drafting and filing of the instant 1987 CIP application: e.g.,
- 1) To describe the 1981 systems and methods, Appellants utilized their right to be their own lexicographer and, within the 1981 parent specification, explicitly coined and defined various terms to have specific 1981 meanings. Much of the same terms/terminology has been carried forward into the description of the 1987 CIP. However, the presence of the common terminology gives a false sense of commonality between the 1981 and 1987 CIP specifications because in drafting the 1987 CIP disclosure, Appellants again utilized their right to be their own lexicographer and explicitly re-coined and re-defined much of the same terminology to have different broadened/expanded 1987 CIP meanings. To the extent that these broadened/expanded 1987 definitions impart new broadened/expanded changes to the substance of the inventions that are now claimed, priority under section 120 to the 1981 effective filing date has been lost.
- 2) The 557 pages of the 1987 CIP specification describe many 1987 CIP "applications". While some of these 1987 "applications" are related to 1981 "applications" that were previously described in the discarded 1981 parent specification (e.g. the respective 1981 and 1987 "WALL STREET WEEK" applications), many of the described 1987 CIP "applications" are entirely new (e.g. the 1987 "Exotic Meals of India" application beginning at line 39 in column 260 of US patent #5,233,654 and the 1987 "Farm Plans of Europe" application beginning @ line 25 in column 295 of US Patent #5,233,654). To the extent that these new 1987 CIP applications effect changes in the substance of the inventions that are now claimed, priority under section 120 to the 1981 effective filing date has been lost.
- 3) As noted above, some of the 1987 CIP application is "related" to the discarded 1981 applications. The most notable one of the related applications being the respective 1987 and 1981 "WALL STREET WEEK" applications; being that these related applications are most often cited and relied upon by Appellants as the basis for claiming section 120 priority to the 1981 effective filing date. Despite the fact that they are "related", the 1987 CIP "WALL STREET WEEK" application is significantly different from the 1981 "WALL STREET WEEK" application as exemplified in the following:

- a) The embedded instruct and information signals of the 1987 CIP "WALL STREET WEEK" application utilized discrete 1987 "SPAM" packet structures as the transport mechanism for the long sequences of data that were transported within the video signal in an asynchronous fashion. In contrast, the 1981 "WALL STREET WEEK" application utilized short discrete codes sequences to trigger/cue certain receiver side actions wherein these short code sequences where transported synchronously within the video signal at one or more discrete "signal word" locations;
- b) The embedded instruct and information signals of the 1987 "WALL STREET WEEK" application comprised "computer software" and the instruct and information signals of the 1981 application clearly did not. And, quite obviously, it was the introduction of said 1987 discrete "SPAM" transport mechanism that enabled the long code sequences of the 1987 "software" to be conveyed/transmitted within the video signal;
- c) The 1987 overlays that were generated at the 1987 receivers of the 1987 "WALL STREET WEEK" applications were generated by the 1987 microcomputer under control of "computer software" that was downloaded to it as a 1987 "instruct signal" at the beginning of the 1987 "WALL STREET WEEK" program transmission. The 1981 instruct signals, on the other hand, did not carry the "software" and 1981 microcomputers of the 1981 application were therefore **preprogrammed** with said 1981 software;
- d) The synchronous nature of the 1981 "signal word" transport mechanism of the 1981 "WALL STREET WEEK" applications has a built in inflexibility due to the fact that all of the 1981 receivers must be preprogrammed to know in advance exactly where to look within the video transmission, and exactly where to look within one or more specific 1981 "signal word" locations, for the discrete 1981 trigger/cuing codes that needs to be detected. This implicit inflexibility seems to explain why it was the presence/absence of 1981 trigger/cuing code that was used as an on/off switching signal for causing the 1981 microcomputers to begin/cease conveying their locally generated images to an associated TV Sets for overlay with a video thereat. In contrast, the implicit flexibility provided by the asynchronous nature of the 1987 "SPAM" transport mechanism seems to explain why the 1987 "WALL STREET WEEK" application utilized two separate instruct codes to cause the 1987 microcomputers themselves to begin and cease the overlay of the locally generated image upon a received video signal prior to providing the "combined" signal resulting therefrom to a 1987 "video monitor". Note too, that is the 1987 microcomputer of the 1987 receiver which effects the overlay prior to display on the 1987 TV monitor, whereas it was the 1981 TV set of the 1981 receivers which effected the overlay during display.

[SEE: "APPENDIX I" in the Office action made FINAL (mailed April 28, 2004).]

To the extent that the new 1987 CIP "WALL STREET WEEK" application effects changes in the substance of the inventions that are now claimed, priority under section 120 to the 1981 effective filing date has been lost.

4) Not only has the 557 pages of the instant 1987 CIP specification effected significant changes to the substance of the described/claimed invention via the new and related 1987 "applications", but the 1987 specification also effects significant changes to the substance of the described inventions via changes/additions/modifications that have been made to the system structure itself; i.e. a fact that is readily apparent by comparing the figures of the 1987 CIP specification to the figures of the discarded 1981 specification. To the extent that the new 1987 CIP system circuitry/structure effects changes in the substance of the inventions that are now claimed, priority under section 120 to the 1981 effective filing date has been lost.

## **TELETEXT "PRIOR ART":**

C-1) When applying "prior art" against pending amended claims, it is both proper and fair for the Examiner to draft a rejection based on the ordinary level of skill in the art that existed at the time of Appellants' alleged invention. Being such, when applying the prior art of record against the pending amended claims, it is both proper and fair for the Examiner to assume that one of ordinary skill in the art would have understood the way in which "standardized" teletext transmission systems operated to format and distribute "pages" of teletext data through conventional TV networks. Namely, it should NOT be necessary for the Examiner to provide teachings in order to explain/evidence the "basics of teletext", for such basics were notoriously well known and would have been understood by one of ordinary skill in the art at the time of Appellants' alleged invention.

Despite this fact, Appellants continues to submit arguments that mischaracterize the way in which "standardized" Teletext systems operated to convey Teletext data through conventional TV networks. Via such arguments, Appellants not only impose an unrealistically low level of skill onto section 102 and 103 issues, but Appellants effectively place a heavy burden on the Examiner to provide an education in what was notoriously well known (i.e. to try to ensure that the teachings/showings of the applied Teletext "prior art" are considered in the context that they would have been read and understood by one of ordinary skill in the art at the time of Appellants' alleged invention). For example, when a piece of applied Teletext "prior art" refers to Teletext "pages", there should be no need for the Examiner to explain what a Teletext "page" is, what the teletext page comprises, and how the teletext page conveys its data/information. Most certainly, one of ordinary skill in the art would have known such facts! To the point, the following is noted:

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#### C-2)

### 1) "Discrete signals":

When Appellants mischaracterize teletext prior art by alleging that conventional teletext "pages" were not comprised of "discrete signals," Appellants force the Examiner to provide explanations and showings that should be unnecessary. This adds an appearance of complexity to rejections made under section 102 and 103 where there should be none. Here, it is interesting to note that much (if not most) of the "prior art" which has been submitted for consideration by Appellants during the present prosecution is teletext "prior art", thereby indicating that the Examiner is not the only person who recognizes the significant relationship that clearly exist between "extended" teletext packet systems and the "SPAM" message packet structure of Appellants' own claimed invention(s). That is, in submitting numerous teletext prior art for consideration, Appellants themselves appear to be aware of this significant relationship too.

### For clarity of the record:

The Examiner maintains that one of ordinary skilled in the Teletext transmission art would have understood that substantially all (if not all) "standardized" Teletext transmission systems operated by:

- 1) Breaking each complete displayable or non-displayable form of Teletext information down into a plurality of discrete "information portions" that can be conveyed via the available bandwidth;
- 2) Utilizing "discrete packet signals" to carry these created discrete information portions through a given TV network by embedding each of the discrete packet signals into a respective video line interval of distributed TV programming; and
- 3) Recovering desired ones of the complete displayable and non-displayable forms of Teletext information on the receiver side of the system via a Teletext decoder that functioned:
  - a) To receive the distributed TV signals containing the embedded discrete Teletext packet signals;
  - b) To separate the embedded discrete Teletext packet signals from the received TV signals;
  - c) To decode the separated discrete Teletext packet signals and to extract those information portions therefrom which correspond to a respective

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complete displayable or non-displayable form of Teletext information desired by the receiver side of the system;

- d) To organize (e.g. re-organize) the extracted information portions so as to recover the desired complete displayable or non-displayable form of Teletext information; and
- e) To use the recovered complete displayable or non-displayable form of Teletext information at the receiver side to:
  - 1. Instruct the receiver side of the system as to how to "locally generate" a displayable Teletext image when the recovered information represents a displayable image;
  - 2. Trigger equipment of the receiver side of the system to take certain action when the recovered information represents equipment control signaling;
  - 3. Load a computer/microprocessor at, or within, the receiver side of the system when the recovered information represents "Telesoftware";
  - 4. Identify the TV program and/or the TV network of the programming currently being received; and
  - 5. ETC,...

In the response filed on 1/28/02 in SN 08/470,571, Appellants refute the fact that one of ordinary skilled in the art would have had such a basic understanding of "prior art" Teletext systems. Appellants go so far as to characterize the Examiner's position concerning the inherent existence of "discrete signals" within standardized Teletext transmission systems as only being "hypothetical" in nature [e.g. lines 4-9 on page 356 of the amendment filed 1/28/02 in SN 08/470,571]. The Examiner could not disagree more. Hence, via "APPENDIX VII" of Office action made FINAL (mailed April 28, 2004), the Examiner attempts to establish a "floor" below which Appellants' erroneous characterizations, misunderstandings, and/or misrepresentations of the conventional

Teletext "prior art" should not be allowed to sink. The 1979 publication entitled "THE CONCEPT OF A UNIVERSAL 'TELETEXT' (BROADCAST AND INTERACTIVE VIDEOTEX) DECODER, MICROPROCESSOR BASED" by Marti is also cited for its showing and descriptions of "universal" videotex decoder structure and processing [e.g., NOTE: The description under the heading "2-POSITION OF THE PROBLEM" on page 1 of the publication, figure 3; etc,...). The 1980 publication entitled "Broadcast Text Information in France" by Marti is cited for its brief description of teletext packet structure [note lines 2-14 on page 361]. Note too the summary of "well known" teletext packet structure in lines 11-22 in column 1 of US Patent #4,660,202 to Woodsum.

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# C-3) 2) "LOCALLY GENERATED":

Appellants continue to allege that displayed teletext images are not "locally generated" images. The Examiner disagrees and, again, notes the following:

- 1) Teletext transmission systems conventionally comprised:
  - a) At least one teletext editing terminal that was located on the transmission side of the TV network; and
  - b) A plurality of teletext decoders that were located within respective TV receivers (or attached thereto) on the receiver side of the TV network.

Each teletext editing terminal and each teletext decoder conventionally comprised a memory that stored randomly accessible display data representing a limited repertoire of displayable character/graphic fonts and symbols.

At the editing terminal, a teletext editor created each page of teletext data by entering a sequence of commands into the editing terminal, wherein the entered sequence of commands defined an instruction set which told the editing terminal as to how to select, assemble, and display pluralities of the stored character/graphic fonts and symbols so as to "generate" a desired teletext image. Once the desired image was completed, the teletext editing terminal operated to store data representing the so formulated instruction set as a respective teletext page (the "generated" teletext images themselves were not stored). A teletext scheduling terminal was then used to schedule the cyclical transmission of ones of the stored instruction sets, i.e. teletext pages, over the TV network.

On the receiver side of the TV network, each user inputted "user specific" data, e.g., user selected teletext page numbers, into their respective teletext decoder that was then locally stored within the decoder. This locally stored user specific data identified the teletext page or pages that were to be displayed by the respective TV receivers. In response to the stored page numbers, each teletext decoder searched through the cyclically transmitted instruction sets to find the instruction set that was labeled with the page number that corresponded to the locally entered and stored page number. Once detected, the discrete packets of the instruction set were captured, organized, and stored within the decoder. The captured and stored instruction set was then "executed" by decoder in order to instruct the decoder as to how to select, assemble, and display pluralities of the stored character/graphic fonts and symbols from its own locally stored repertoire *in order to "locally generate" the desired teletext image that was to be displayed.* 

The accuracy of the Examiner's position, concerning the fact that teletext page data represented instruction that teletext receivers/decoders executed in order to "locally generate" their displayed teletext images, is evident in the prior art of record:

"The first step in teletext service is the translation by a teletext editor of text, pictorial information and display attributes (such as color, flashing characters and so on) into a series of instructions to be transmitted to the teletext decoder. The instructions for each page in the teletext 'library' are then broadcast continuously on a revolving basis by multiplexing the data into the vertical blanking interval. The user accesses a desired page of teletext information by entering the page number, e.g. by pressing the appropriate buttons on a control unit. The teletext decoder then selects the page from the revolving transmission, stores the coded information in memory, processes that information to the extent necessary for display, and produces the page on the television screen. Where captioning is transmitted, the decoder will superimpose the captioning over the normal television picture." (Emphasis added). [Page 5 of the 3/26/1981 "Petition For Rulemaking" file with the FCC by the United Kingdom Teletext Industry]

"[Videotex] data transmitted do not represent directly the picture which is generated in the receiver, but encoded instructions to the receiving decoder"

[Lines 8-10 under the heading "1-Scope" on the first page of the article "The Concept of a Universal 'Teletext' (Broadcast and Interactive Videotex) Decoder, Microprocessor Based]

"The [teletext] receiving equipment can be conventionally thought of as consisting of three sections: a) signal acquisition, b) memory, c) display generation. The signal is acquired and suitably processed before being loaded into memory. Memory is repeatedly accessed by the display generation section to obtain the instructions which direct it to create the images of alphanumeric and graphic characters and place them on the screen." (Emphasis added.)

[The first paragraph under the heading "Receiving Equipment Options" on page 539 of the 1980 article "THE ROLE OF THE TELEVISION RECEIVER MANUFACTURER IN THE UNITED STATES" by Ciciora et al.]

"It must be clearly held in mind that the [teletext] image displayed on the CRT is synthetic video and that the synthesis is done locally" (Emphasis added.)

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[The first two lines under the heading "Synthetic Video" on page 545 of the 1980 article "THE ROLE OF THE TELEVISION RECEIVER MANUFACTURER IN THE UNITED STATES" by Ciciora et al.]

"In a picture display device for displaying a mixed picture signal which signal comprises a conventionally received television picture signal and a locally generated signal, such as a teletext sub-title..."

[The first 6 lines in the abstract of GB 2,062,401 patent document to Korver]

"Picture display devices of such type, have a picture screen on which a mixed picture signal can be displayed are known. By means thereof pictures can be displayed in which locally generated characters, drawing elements and similar items can be superimposed on a normal picture, for example a moving picture transmitted, for example, by a transmitter and received in a conventional manner. Such a signal can be generated by, for example, a teletext decoder in the display device" (Emphasis added.)

[The first paragraph under the heading "Background of the Invention" in column 1 of US Patent #4,347,532 to Korver]

#### C-4

## 3) Computer implemented teletext decoders:

A) At the time of Appellants' alleged invention, it was notoriously well known in the art to have implemented "basic" level teletext decoding circuitry, i.e. decoding circuitry that was capable of providing basic teletext decoding features, using dedicated logic circuitry [NOTE: figure 1 of Barnaby (U.S. Patent #3,982,064)]. The implementation of basic level decoders using dedicated circuitry was recognized as being practical given its low unit "cost"; i.e. such decoders were inexpensive to produce.

While not required/mandatory, at the time of Appellants' alleged invention, it was also notoriously well known in the art to have implemented even said "basic" level teletext decoding circuitry using a software driven "computer" in place of some or all of

the dedicated logic circuitry [Note: lines 50-54 on page 1 of <u>Betts</u> (GB # 1,556,366); and, Compare figure 1 of <u>Betts</u> (GB #1,556,366) to figure 1 of <u>Barnaby</u> (U.S. Patent #3,982,064)]. The computer implementation of teletext decoders was recognized as having been advantageous/desirable over dedicated circuitry implemented decoders due to their inherent flexibility [e.g. 70-73 on page 1 of <u>Betts</u> (GB # 1,556,366)].

In fact, the computer implementation of the teletext decoder was known to have been required/"mandatory" when implementing "advanced" level decoders capable of providing advanced teletext decoding and display features [e.g. note section 5.3.1.3 of the "EIA Systems Analysis Chart" (revised as of August 20, 1981)]. The additional cost of the computer implemented teletext decoder was even deemed "appropriate" at the time of Appellants' alleged invention with regard to "intermediate" level teletext decoders [e.g. note section 5.2.1.2 of the "EIA Systems Analysis Chart" (revised as of August 20, 1981)].

- B) Figure 3 on page 365 of the 1980 article "Broadcast Text Information in France" by Marti is described as being an illustration of: "The general structure of an Antiope receiver". As illustrated, the "decoder" within the "general structure" of the Antiope receiver was implemented using a software driven computer (i.e. the illustrated "microprocessor").
- C) Figure 3 of 1979 publication entitled "THE CONCEPT OF A UNIVERSAL 'TELETEXT' (BROADCAST AND INTERACTIVE VIDEOTEX) DECODER, MICROPROCESSOR BASED" by Marti is described as being illustrative of: "Structure of a 'universal" videotex decoder". As illustrated, the "processing unit" of the "universal" decoder structure comprised a software driven computer (i.e. the illustrated "microprocessor").

[Here, it is also significant to note that <u>Marti</u> explicitly indicates that the software used to program the "microcomputer" could be provided and loaded into the universal decoder "from a line (broadcast or telephone)" [see the paragraph in lines 22 on page 6 of this publication]].

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# C-5) 4) The "Mixed" display mode:

A) It was notoriously well known by those of ordinary skill in the Videotex art, at the time of Appellants' alleged invention, that Videotex transmission systems encompassed two components: 1) A one-way teletext system component; and 2) A two-way viewdata system component.

"Videotex has two distinct forms of information transmission – Teletext and Viewdata. Teletext is the transmission of textual data and graphics to a consumer adapted television set using broadcast transmission techniques. Viewdata is the interconnection of a home terminal device to a host computer via narrow band transmission facilities, such as a telephone line. Although Teletext and Viewdata display information on a consumer TV screen in similar fashion, they have managed to evolve separately. Each of the two techniques has its own advantages and disadvantages. In Teletext, data is sent as a recirculating data stream. The amount of data stream is limited only by the number of transmission scan lines available for data transmission and the predetermined acceptable latency between page selection and display. Viewdata provides almost instant access to a large number of display pages with minimum access time. However, because it is similar to a timesharing service, telecommunication and computer port requirements have high associated cost burdens."

[Pages 14 and 15 of the article "Videotex Services via CATV – Hybrid Systems Approach" by <u>Dages</u>].

- B) At the time of Appellants' alleged invention, it was notoriously well known in the Videotex art for Videotex display devices to have provided a "mixed display mode" in which Videotext image data was simultaneously displayed, as an overlay or inset, within the video component of received TV programming. Such a state of the art is clearly established via the following citations:
  - 1) That which occurs when signal V2 is selected for display via button 16 of the remote control unit 9 shown in figure 4 of Oono et al. [JP 55-028691];
  - 2) That which occurs when a combined signal is selected via selector switch "S" that is shown in figures 2 and 3 of Yokoyama [JP 54-154215];
  - 3) That which occurs when input "2" of switch "3" in figure 4 of Hutt et al. [US #3,961,137] is selected for output;
  - 4) That which is described in lines 29-44 on page of <u>Turner</u> [GB Patent #1,486,424;

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5) That which is described in the last paragraph on page 356 of the article entitled "Teletext/Viewdata LSI" to <u>Harden</u>;

- 6) That which is described in lines 40-45 of column 4 of <u>Ciciora</u> [US Patent #4,233,628].
- C) During the present prosecution, Appellants' have alleged that said well known a "mixed display mode" of Videotex pertained only to the teletext form of Videotex and did not pertain to the Viewdata form of Videotex. The Examiner maintains that Appellants' allegation is erroneous. That is, while the "mixed display mode" of Videotex is often described in the prior art with respect to the teletext component of Videotex given the fact that Teletext often carried "program related" information requiring simultaneous display, those of ordinary skill in the art recognized nonetheless that the "mixed display mode" of Videotex was applicable to the Viewdata form of Videotex too. This fact is evident in the following citations:
  - 1) The first three lines on page 11 of the PTO provided <u>Tsuboka et al.</u> translation [JP 55-45248] evidences the fact that the "mixed display mode" of Videotex systems were known to have applied to the display of the Viewdata component of Videotex too; ("A display switching circuit 29 is a circuit which switches or superimposes a television signal demodulated by the color demodulation circuit 21 to/on the aforesaid character pattern display signal. By switching these signals, a conventional television broadcast may be switched to or superimposed on a character pattern information service broadcasted or sent over a telephone circuit, and displayed on the CRT 31.")
  - 2) While the display mixed display mode described in lines 40-45 of column 4 in <u>Ciciora</u> [ US #4,233,628] was described with respect to teletext data display, <u>Ciciora</u> explicitly indicated that this teletext display process described therein had equal applicability with respect to Viewdata display too [e.g., lines 46-52 of column 2];
  - 3) The article "Teletext/Viewdata LSI" by Harden:
    - a) Described the system of figure 2 which was capable of receiving and displaying Teletext data or Viewdata data, wherein the circuitry of figure 2 comprised:
      - 1. The illustrated "DATA ACQUISITION" chip (shown in detail in figure 3);

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2. The illustrated "STORE"/ RAM; and

3. The illustrated "Video Generator" chip (shown in detail in figure 4).

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- b) Explicitly stated that once the Teletext and/or the Viewdata had been acquired and loaded into the "store"/RAM, the video generation and display by the Video Generator chip could proceed without knowledge as to whether the data being processed was acquired from the Teletext source or the Viewdata source [e.g. the first paragraph under the heading "II. Video Generator" on page 356 of the publication]; and
- c) Explicitly stated:
  - 1. That the "Video Generator" chip had the "ability to display both text and picture [at] the same time"; and
  - 2. That "if the TV circuitry is fast enough a MIX mode will enable all characters to be inset into the TV picture".

[SEE: the last paragraph on page 356].

Clearly, the above noted descriptions in <u>Harden</u>, indicated:

- 1) That once acquired and stored, captured Viewdata data and Teletext data were, or at least could be, processed and displayed in like fashion by the Video Generator, wherein the video generator was described as having had the ability to display both text and video at the same time; and
- 2) That, in any event, "all" text data that was produced by the Video Generator, regardless of source, could be displayed in a "mixed" mode provided that the (switching) circuitry of the TV was fast enough.
- D) On a more general note, the Examiner maintains that it was notoriously well known in the art that TV receiver circuitry that was configured to operate in a "mixed display mode" were known to have been "generically" advantageous in that they permitted the display of auxiliary information (i.e., be it videotext data, computer data, auxiliary video information, on-screen display, etc,...) without interruption to the content of TV programming currently being viewed by the viewer [note, for example, lines 68-80 on page 4 of Yoshino et al. (GB 1,405,141)].

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#### **D. ADDITIONAL ISSUE:**

### D-1) The "Software" Issue:

A) The Examiner notes that Appellants' instant 1987 CIP specification describes at least one embodiment of invention that used signaling, embedded within the VBI of TV programming, to download computer software to the ultimate receiving stations in order to have programmed/reprogrammed the station on the fly [note pages 20-27 of the instant 1987 CIP specification]. Throughout much of the present prosecution, Appellants have alleged that the past 1981 parent specification implicitly described this same downloading of computer software via the 1981 "instruction signals" of the 1981 inventions that were embedded within the VBI of the 1981 TV programming. The Examiner maintains that Appellants' allegation is untrue for reasons that have been addressed throughout the record [SEE: Appendix IV of this Office action].

Now, within the "Declaration of Dr. George T. Ligler" filed with the response of January 31, 2003 in application #08/487,526, Appellants' expert comments on this issue stating that the Examiner has "overlooked" the fact that the 1981 specification explicitly states that the ultimate receiver station of the 1981 inventions might be "reprogrammed" from a remote location via a telephone line. The following is noted:

- The fact that the 1981 specification taught that the 1981 receiver stations might be reprogrammed from a remote location over a telephone line has absolutely nothing to do with the Examiner's longstanding position that the 1981 specification does not teach the downloading of software via the 1981 "instruction signals" that were embedded in the VBI of the 1981 TV programming. Clearly, the comment made by Appellants' expert does not address the issue that it purports to address. If, however, the expert's position is representative of the kind of "dual" 112 support that he (and Appellants) are still relying on for proof of "priority" under section 120 (i.e. that the 1981 description of reprogramming a receiver via a telephone line allegedly provides "priority" to the 1981 filing date for claims directed to the 1987 downloading of software via the embedded SPAM signaling), then the Examiner cites it as another example of the diverse nature of the subject matter from the respective 1981 and 1987 CIP specifications that is being relied upon by Appellants to allege, and attempt to obtain, the 1981 effective filing date for the 1987 subject matter that is now being claimed (i.e. further evidence that Appellants have indeed confused "anticipation" under section 102 with the adequate written description requirement of section 112 that has been incorporated into section 120); and
- ii. The 1987 CIP specification explicitly describes at least one embodiment of invention where the 1987 ultimate receiver station was reprogrammed on the fly, e.g. during a TV program, via instruct signaling embedded therein. The

statements from the 1981 specification that have been cited by Appellants' expert only indicate that that the 1981 receiver stations were capable of being "reprogrammed' from a remote location via the telephone line, but it does not appear to give any indication whatsoever as to when this 1981 reprogramming process was to have occurred. That is, the cited 1981 teachings do not state or describe and embodiment in which the 1981 reprogramming of receivers occurred "on the fly" as Appellants' expert suggests. Due to the synchronous nature of the 1981 "signal word" structure, it would appear that all of the receiver stations of the 1981 networks would have had to be reprogrammed with new detection "patterns" so as to know where and when to look for the instructions/information directed thereto whenever the content of the "words" was changed, thereby making the process of reprogramming the 1981 receivers "on the fly" a major undertaking (if possible at all within the allotted time). In any event, nowhere within the 1981 specification was such reprogramming on the fly ever described or suggested. To the contrary, these cited 1981 teachings might only have been an indication that the 1981 receiver stations could be remotely initialized in the presence of a technician during installation and/or in the presence of a technician during a service "tier" modification - (who knows?). It appears that the expert has improperly imparted specific meaning/"purpose" to the cited 1981 remote "reprogramming" descriptions when in fact the 1981 descriptions were themselves silent as to such meaning/purpose (i.e. the specific meaning/"purpose" imparted onto the 1981 teachings by the expert appears to be speculation improperly imported back into the 1981 descriptions from the 1987 CIP). The Examiner maintains that it is improper for Appellants (or their expert) to read and/or import specific meanings that may be reasonably inferred from teachings of the 1987 CIP specification back into lesser teachings of the 1981 specification that do not reasonably infer these same meanings. Certainly, teachings imported into the 1981 parent specification from the 1987 CIP specification cannot legally serve as a basis for priority to the earlier effective filing date under section 120. The Examiner continues to struggle with this issue. Clearly, the "new" 1987 CIP specification explicitly changes and/or expands the terms and teachings of the 1981 parent specification. In claiming a 1981 effective filing date for claims that necessarily derive their required section 112 support solely from these changed and expanded 1987 CIP disclosures, it appears to the Examiner that Appellants are effectively transporting the changed/expanded 1987 CIP subject matter of the instant claims back in time to the 1981 date (i.e., effectively importing this changed/expanded 1987 subject matter back into the 1981 specification). This seems to be the reason why Appellants have found it necessary to argue again and again, e.g., throughout the course of the present prosecution, that "common subject matter" is not a requirement of section 120 (i.e., rather than explaining where the claimed subject matter is disclosed in both applications and why this subject matter does in fact constitute "common subject matter").

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### D-2) THE "MODE II" CAPTIONING FEATURE OF "ANTIOPE":

1) Those of ordinary skill in the art, at the time of Appellants' alleged invention, had recognized that there was a need and desire to transmit closed captioning data pertaining to multiple different languages within each TV program transmission. Because teletext captions had to be transmitted sequentially through the TV network, it was found to be difficult to simultaneously synchronize the display of all the different captions/languages to the same TV programming. Hence, a "Mode II" captioning feature was developed and added to new teletext "standards" (e.g. ANTIOPE) for the expressed purpose of simultaneously synchronizing multiple captions to the same program.

"The possibilities of teletext closed captioning for the hearing-impaired and for foreigners are well known and were first experimented in the United Kingdom. The problem of synchronizing the TV program and the captions was not really solved, except at the price of heavy time delay constraints. If several different languages are to be captioned at the same time with a given program, new developments are needed, because asynchronism appears for multilanguage captioning applications. The new standards make it very simple to add sophisticated captioning options to a normal teletext decoder: in this new process, the synchronism control signal are completely separate from the 'character attributes' - they are actually considered as a 'message attribute'.

[e.g. section 5.1.3 on page 33 of the 3/1980 publication "Development & Application of the Antiope-Didon Technology]

- 2) The way in which these "new" teletext standards solved the synchronism problem seems best explained within the prior art of record by the "CBS/CCETT NORTH AMERICAN BROADCAST TELETEXT SPECIFICATION (EXTENDED ANTIOPE)" which is dated May 20, 1981. [SEE: sections 7.0-7.3 on pages 135-138; and sections 8.9.1 to 8.9.2.2.2 on pages 159-162]. That is, as explained within this publication:
  - a) Different classes of captioning (and different levels thereof) were transmitted from the transmitter as conventional teletext pages prior to the time that they were to be displayed;
  - b) Each receiver captured and stored (but did not display) the page of teletext data which corresponded to the class (and the level) of captioning that was selected and desired by the user;
  - c) At the desired time of display, a "reveal"/"unmask" message was transmitted from the transmitter station which caused/triggered the stored captions at the respective receivers stations to be simultaneously outputted and displayed in precise synchronism with the TV programming.

That is, the Mode II captioning feature provided the mechanism by which multiple program related messages/captions could now be transmitted sequentially and asynchronously within the TV programming, while enabling each of these sequentially transmitted captions to be displayed simultaneously and in precise synchronism with the same TV programming at different receiver stations in response to the receipt of the same reveal/unmask display signal.

"Through use of the "Y" bytes, program related pages can also be transmitted. Program related pages are those pages that are transmitted with a television program and are intended to be a complement to the television program. One example of a program related page is captioning"

"Captioning is a program related teletext message that is transmitted to the decoder and superimposed over the program video at a pre-designated time. The captioning message functions in a manner similar to a normal teletext message except that instead of having to select each page individually the user selects a classification of caption and a level (from 1 to 9) and the decoder automatically displays and erases the appropriate captions at the proper times. In the case of captioning the session level identifies the fact that the message is a captions. A caption message is characterized by the fact that it is displayed, not over a blank screen, as in the case of normal teletext, but rather over program video. Depending on the decoder manufacturers' option, the caption may be displayed keyed over the video or inserted into the video in a box. Captions are transmitted to the decoder with a bit in the header set so that the caption is captured and put into memory but not displayed. This way many different versions of the same caption may be sent an each decoder can capture the version it chooses. When the caption is to be displayed a simple control packet is sent with the caption type designator equal to the caption to be displayed along with a reveal bit. This causes the caption to be displayed over the program video. To erase the caption another message is sent to the decoder telling the decoder to erase the page and wait for the next caption"

It is noted that similar descriptions of this Mode II captioning feature can be found elsewhere in the prior art of record too; i.e. for example, as provided in sections 7.11.2.2 and 7.11.2.3 on pages 72 of Appendix B in the petition filed with the FCC by CBS on 7/29/1980. Additionally, note sections 7.1.2 to 7.1.2.4 for systems "A" and "C" of the "EIA Systems Analysis Chart" (revised 8/20/1981).

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"When many captions are sent, at various levels and in various languages, forming classes, all varieties for a given class of captions are sent far enough in ahead to allow the decoder to store the one selected. The Y caption flag (Y1<sub>3</sub> b6=1) is raised on each one, implying transparent background and suppress page display. The conceal flag (Y1<sub>3</sub> b8=1) should also be raised. After all varieties of a given caption are sent, one additional record is sent with the conceal flag low [(equal reveal) Y1<sub>3</sub> b8=0]. This single command causes all decoders which have been storing a class of captions to display it. This last command is seen by all decoders, regardless of what page number they may have been instructed to look for because this page has not number and has the alarm flag raised in the Y's (Y1<sub>1</sub> b8=1)."

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"To remove a class of captions and leave a blank screen, an alarm page is sent with the conceal flag raised, (Y1<sub>3</sub> b8=1)."

- 3) The 8/1980 publication "ANTIOPE TELETEXT CAPTIONING" also describes this same "MODE II" captioning feature of the ANTIOPE teletext standard. This publication has been cited in response to arguments that have been submitted by Appellants throughout the present prosecution. For example, the Appellants have attempted to distinguish the claimed invention over applied teletext prior art by arguing that the signals of teletext are not conveyed within pluralities of discrete packet signals that, therefor, must be assembled/re-assembled on the receiver side of the network. As is evident from the cited prior art, Appellants' argument is simply untrue (i.e., even the shortest of teletext messages were conveyed within a plurality of discrete teletext packet signals). Namely:
  - a) This publication makes it clear that the "MODE II" captioning feature of ANTIOPE utilizes the same teletext equipment that is used for the teletext service itself being that the captions are transmitted as standard teletext pages.

"When Antiope is employed for captioning, it uses the same equipment as for teletext" (the second column of page 618)

"Each caption is broadcast in the form of a page which is identical to a teletext page. The page number is used to select the language – this is the number the user keys on the decoder keypad. The operation is the same as for the selection of a teletext page; the decoder functions are identical" (the first column of page 619)

b) This publication makes it clear that all the teletext pages of the ANTIOPE standard were transmitted within the "discrete teletext transport packets" of the

DIDON standard and that even the shortest of the captions (i.e. the word "yes") had to be transmitted using more than one of these discrete DIDON transport packet.

"The word 'yes', wherever it is located on the screen, if it is white on black, is coded in 23 bytes (i.e. 1.15 DIDON packets), and text containing 40 characters requires 60 bytes (i.e. 3 packets)" (the second column on page 619).

c) This publication re-emphasizes that it was the ability of the ANTIOPE system to mask (conceal) and unmask (reveal) teletext messages which enabled the ANTIOPE system to separate the act of transmitting messages/captions from the act of displaying them (i.e., a key feature that is vital to the implementation of the MODE II captioning).

"Considerable flexibility is also given by the use of text masking and unmasking attributes. They enable us to differentiate reception, which can be stored, from display, which is requested a particular moment without being dependent on the time of transmission" (page 619)

[In Appellants' "WALL STREET WEEK" application, a "command signal" was embedded, at a specific time, within the "Wall Street Week" TV program being broadcast from a transmitter station. At each receiver station, said "Wall Street Week" program was received and the "command signal", embedded therein, was detected. At each receiver station, the detected "command signal" triggered a locally generated user specific graphic to be displayed as an overlay over the displayed video portion of said received "Wall Street Week" program. Thus, via the embedding of a single "command signal", the display of different locally generated user specific overlays at different receiver stations were all "synchronized" to occur at said specific time within the "Wall Street Week" program.

As is evident from the prior art of record, the MODE II caption feature of the ANTIOPE teletext standard also utilized a single common display "command signal" to cause different "locally generated" program related teletext images/captions to be simultaneously overlaid at respective TV receiver stations in precise synchronism with the TV programming to which they relate.

Namely, in mode II captioning, reveal/unmask "command signals" were embedded, at specific times within, a transmitted TV program being broadcast from a transmitter station. At each receiver station, said program was received and the reveal/unmask "command signals", embedded therein, were detected. At each receiver station, each detected reveal/unmask "command signal" triggered a locally generated user specific graphic (e.g. a respective "program related caption") to be displayed as an overlay over

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the displayed video portion of said received TV program. Thus, via the embedding of each reveal/unmask "command signal", the displays of different locally generated user specific program related messages/captions/overlays at different receiver stations were all "synchronized" to occur at the specific times within the TV program.] Appellants have attempted to distinguish the overlays of their "Wall Street Week" application from the "program related captioning" overlays of ANTIOPE's mode II captioning feature by arguing that teletext images/captions are not "locally generated" at the receiver. For the reasons discussed above in paragraph C-3 of this Office action, Appellants' arguments

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### D-3) "INTERACTIVE" TV:

are simply erroneous and misplaced.

## 1) The Interactive System of U.S. Patent #3,008,000 to Morchand:

As is illustrated on the cover page, <u>Morchand</u> disclosed an interactive multi-channel TV system that comprised:

- a) A plurality of TV stations (12-1 to 12-N) for transmitting respective TV signal segments/fragments which, taken together, represent the complete interactive TV program; and
  - b) TV receiver stations each of which includes:
    - 1. A TV tuner (@ 18A) for receiving selected ones of the program segments/fragments;
    - 2. An audio display device (@22) for outputting the audio component of each selectively received program segment/fragment;
    - 3. A video display device (@ 42) for outputting the video component of each selectively received program segment/fragment; and
    - 4. Dedicated control circuitry (@ 18B, 26, 28, and 30) for controlling the TV tuner to sequentially select the program segments/fragments that are to be received based:
      - a. Control information that is embedded in the active video portion of TV programming segments/fragments (as detected/determined @ 40A-40n); and

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b. User responses entered @ 44a-44n.

The result being a system in which each of the receiver stations, under control of dedicated circuitry, interactively "branched" through a selected sequence of the available program segments/fragments, comprised of multi-channel TV signal segments/fragments, based on a respective user's specific inputs/responses, thereby interactively producing a user specific multimedia (i.e. audio/video) presentation.

#### 2) The Interactive System of U.S. #3,245,157 to Layiana:

<u>Laviana</u> disclosed an interactive TV system that comprised:

- a) A transmitter station (not shown) for emanating interactive programming comprised of a plurality of program segments/fragments wherein, as illustrated in figure 1, the program segments/fragments comprised:
  - 1) A common video signal portion for providing visual information; and
  - 2) One or more audio signal portions providing a plurality of audio channels; and
- b) At least on receiver station comprised of:
  - 1) A TV receiver (@ 16) for receiving and displaying the common video signal;
  - 2) Decoder circuitry (@ 18) for receiving the one or more audio signal portions and for locally "retransmitting" the plurality of audio channels provided therein as separate audio transmissions; and
  - 3) And a plurality of user controlled devices (@ figure 2) each of which includes:
    - a) Input keys for allowing the respective user to input responses to received/displayed program segments; and

b) Receiving/tuning circuitry that, based on the user inputs/responses, selects and/or tunes to the one of the retransmitted audio channels which provides further information (i.e., an aural "explanation") pertaining to the user's input/response.

In Laviana, the separate audio transmissions were described as comprising separate radio transmissions requiring the user controlled device to have comprised one or more tuners for selecting the appropriate audio segment/fragment [e.g., lines 2-24 of column 4].

## 3) The Interactive System of D.E. Patent Document #2,904,981 to Zaboklicki:

Zaboklicki discloses and interactive TV system for transmitting and displaying complete interactive TV programming comprised of TV signal segments/fragments.

Zaboklicki explicitly described two types of interactive programming:

- a) Interactive programming that is to be watched by a plurality of viewers at each receiver location wherein, as in the case of <u>Laviana</u> above, the interactive programming was comprised a common video portion and a plurality of audio channel portions [e.g. "sports and entertainment" programs]; and
- b) Interactive programming that is to be watched by a smaller number of viewers at each receiver location wherein, as in the case of <u>Morchand</u> above, the interactive programming was comprised pluralities of multi-channel video segments/fragments in addition to the plurality of audio channel portions [e.g. "educational and popular science broadcasts" programs].

#### That is:

A) As in the case of <u>Laviana</u>, <u>Zaboklicki</u> discloses an application of his invention in which each receiver station displayed a common video portion and, in response to user inputs, selected and/or tuned to ones of the plurality of audio channel signals. The

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plurality of audio channels were described as having been "transmitted analogously to the known signals of foreign language translations *on audio channels or radio channels*" (emphasis added); and

- B) As in the case <u>Morchand</u>, <u>Zaboklicki</u> also disclosed an interactive multi-channel TV system application of his invention. However, the system disclosed by <u>Zaboklicki</u> was significantly enhanced relative to the system disclosed by <u>Morchand</u>. The following is noted:
  - a) In <u>Zaboklicki</u>, the segments/fragments of the complete interactive TV programs were not limited to TV signal segment/fragments as in <u>Morchand</u>, but included program segments/fragments of other sources and types such as:
    - 1. Pages of teletext data;
    - 2. Supplemental/Auxiliary audio signal components;
    - 3. Locally stored video information;
    - 4. Etc, ...
  - b) In <u>Zaboklicki</u>, the control information was not conveyed as mere modulations within the active image portion of the TV programming segments as in <u>Morchand</u>, but was conveyed as "Telesoftware" (i.e. computer software) via the pages of an embedded Teletext service;
  - c) In <u>Zaboklicki</u>, the control circuitry was not implemented merely using dedicated circuitry as in <u>Morchand</u>, but was instead comprised of:
    - 1. A teletext decoder (@ 56 of figure 3); and
    - 2. A software driven CPU (@ 6,7, 39, and 49 of figure 3) that was programmed, on the fly, via software (i.e., said "Telesoftware") that was downloaded to said CPU from the transmitter via pages of said Teletext service that was embedded within the VBI of the interactive programs TV signal segments/fragments;

d) In <u>Zaboklicki</u>, a telephone line was utilized as a return link whereby a recorded record of a user's inputs/responses could transmitted to a remote collecting station (see figure 4).

The result being a system in which the CPU (6) of each receiver station operated. under control of the downloaded Telesoftware, to interactively select and display a sequence of the available program segments/fragments (i.e. which segments/fragments included teletext images, secondary audio signals, and multi-channel TV signals), based on the specific responses that are inputted by the respective user to thereby create. interactively, a user specific *multimedia* presentation. That is, in Zaboklicki, the downloaded Telesoftware provided the CPU with the "instruction"/script that it needed to follow in order to have identified, selected, and displayed each "next" program segment/fragment from the user's specific response to each "current" displayed segment/fragment. That is, at any branch point within the interactive program, the CPU of each Zaboklicki receiver station had to have determined where in the script it was, i.e. it must have had some way of knowing/determining "content" of the segment/fragment currently being displayed, for it to have identified the next segment/fragment that had to be interactively selected and displayed as a result of the specific response inputted by the user; i.e. hence the described segment/fragment identifiers of the Zaboklicki disclosure.

# 4) The Interactive System of U.S. Patent #4,413,281 to Thonnart:

Thonnart also disclosed an interactive TV system. The interactive TV system disclosed by Thonnart has many similarities to the interactive system that was described by Zaboklicki. The following is noted:

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a) In <u>Thonnart</u>, the program segments/fragments of the complete interactive TV programs included:

- 1. Pages of digital teletext data;
- 2. Analog audio signals; and
- 3. Analog video signal representing sequences of still video frames;
- 4. Etc, ...
- b) As in <u>Zaboklicki</u>, in the system disclosed by <u>Thonnart</u> segment/fragment "identifiers" were added to segments/fragments of the interactive program to enable the receivers to identify the receipt of those which needed to be selected and displayed [note claim 1];
- c) As in Zaboklicki, in the system disclosed by Thonnart:
  - 1. Command logic sequences (i.e. "software") were generated at the transmitter [e.g. lines 37-46 of column 2];
  - 2. Said command logic sequences were downloaded to the receiver station, as part of the digital data steam, with priority over the teletext data [e.g. lines 5-13 and 25-32 of column 4];
  - 3. Said downloaded command logic sequences were received and stored within a logic memory (27) of the receiver stations [lines 33-40 of column 4]; and
  - 4. Said stored logic sequences (i.e. software/"programming") were then executed by the receiver stations to control the selection and display of the program segments/fragments, based on the user's inputs, to generate a multimedia user specific interactive presentation [e.g. lines 41-58 of column 4; lines 37-45 of column 2; etc,...]; and
- d) In <u>Thonnart</u>, the digital and analog segments/fragments of the complete interactive program could be transmitted to the receiver station over respective/separate/different channels wherein, in such cases, the receiver stations would require respective/separate/different tuners so that the analog and digital segments/fragments could be received in simultaneously (i.e. in parallel) [note lines 14-24 of column 4]; and

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e) In <u>Thonnart</u>, the page of teletext data were displayed either in sequential fashion or simultaneous fashion with respect to the video still frames (see claim 1).

5) The Interactive System of D.E. Patent Document #2,550,624 to Haefner et al.: Haefner et al. also disclosed an interactive TV system. As with Zaboklicki, the receiver station circuitry was controlled by a software driven processor (@ 13 of figure 2) which received the software from the transmitter station. However, in Haefner et al., all of the program segments/fragments of the complete interactive TV program, e.g. including the TV signal program segments/fragments, were downloaded and stored on a random access storage medium of the receiver station in advance of the user interaction, thereby eliminating the need for (and use of) dedicated TV transmission channels as utilized in the multi-channel systems of Zaboklicki and Morchand. That is, instead of controlling the tuner of the TV receiving circuitry to tune to the respective TV program segments/fragments that were to be selected and displayed, the computer (13) in Haefner et al. controlled its receiver to retrieve the respective program segments/fragments that were to be selected and displayed from said random access memory medium.

# **DETAILED OFFICE ACTION:**

## E-1) THE SECTION 120 PRIORITY ISSUE:

a. Contrary to Appellants' recent objections, it was Appellants who first introduced "blanket statements" into the record alleging that many of their 328 bulk filed related applications (i.e. all claims contained therein) were entitled to the 1981 effective filing date of their 1981 parent application under section 120.

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b. In order to "prove" that these claims were entitled to the 1981 effective filing date, and to respond to section 112-1 rejections made by the Office, Appellants initially alleged it was "clear" from "the law" that they only needed to show that each claim in question was supported in accordance with the requirements of section 112-1 by the disclosure of the 1981 parent specification alone. The Office was initially misled by Appellants' allegation accepting it as truth.

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- c. Eventually, however, the Office realized that Appellants' position concerning "the law" was both erroneous and flawed. That Appellants' sole reliance on the 1981 parent disclosure for addressing both section 112 rejections and section 120 priority issues might have been correct had the disclosure of their 1981 parent application not been discarded at the time the 1987 CIP was drafted and filed; i.e. had the 1981 specification been formally "incorporated" into the 1987 CIP specification of Appellants' 328 bulk filed applications. But the 1981 disclosure was not formally incorporated into the 1987 CIP specification and, because it was not, the Office realized that Appellants:
  - i. Could (and still cannot) rely on the 1981 specification at all for rebutting section 112 rejections because, by law, section 112 support for the claims must come from the "instant specification" on which the claims depend. The "instant specification" is the 1987 CIP specification <u>alone</u> being that the 1981 parent specification was never incorporated therein; and
  - ii. Could (and still cannot) rely on the 1981 specification alone to establish section 120 priority to the 1981 filing effective date for that which is claimed because each of the instant claims is only entitled to section 120 priority if it recites "common subject matter" wherein, under the present circumstances, "common subject matter" is:
    - (1) That 1987 subject matter which is described and claimed within the instant 1987 CIP specification in accordance with all of the requirements of section 112; wherein the "instant specification" is the 1987 CIP specification alone because the 1981 parent specification was not incorporated therein; and
    - (2) That *same* claimed 1987 subject matter that can be shown, by Appellants, as having been previously described in the past 1981 parent specification in accordance with all of the same requirements of section 112.
- d. Given this "new" realization, the Office challenged Appellants' notion that "the law" allowed the section 112 rejections and the section 120 priority issue to be addressed using the 1981 parent specification alone or even at all. In response to this challenge,

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Appellants conceded that that section 112 rejections must be addressed using the instant 1987 CIP specification alone. With respect to the section 120 priority issue, however, Appellants only conceded that some type of "dual" section 112 support from the respective 1981 and 1987 CIP disclosures was necessary, however, Appellants outright refuted the position taken by the Office that this required "dual" section 112 support must be provided by any kind of "common subject matter." Appellants maintains that:

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[Section] 120 does not require an Applicant' to demonstrate that the disclosures relied upon under '120 have anything in common besides their ability to separately comply with '112-1 with respect to the claims for which priority is sought. Accordingly, the Examiner's focus on comparing the support from the two applications for similarity or common subject matter is improper and irrelevant because all Applicant's are required to do is satisfy 120 is show that each disclosure meets the requirements of '112-1 for a given claim. [Emphasis added - see page 141 of Appellants' response filed on 1/28/2002 in application S.N. 08/470,571]

Accordingly, the law requires a two part test in which the Applicant' separately demonstrates 112 support for each application. In the FOA, the Examiner distorts this straightforward test by imposing a third element of the test whereby the 112 support from each application consists of "common subject matter." [See the last 10 lines on page 137 of the response filed on 1/28/2002 in SN 08/470,571].

#### The Examiner disagrees:

However, as mentioned earlier, a continuing application is entitled to rely on the earlier filing date of an earlier application only with respect to subject matter common to both applications (Emphasis added.)

[In Transco Products, Inc., v. Performance Contracting, Inc., 32 USPO2d 1077]

The inquiry required by section 120 demands a comparison of 1) the claims of the parent and CIP applications and 2) any other disclosures made in the applications such as specification and drawing. Acme Highway, supra, at 1079, 167, USPQ at 132-33.

[Stern v. Superior Distributing Company et al., (CA 6), 215 USPQ 1089 at 1094]

e. Then, within ones of the bulk filed applications, Appellants began submitting a chart that identified "correlated" subject matter that existed between the 1981 and the 1987 specification. Appellants also began submitting claim charts for establishing alleged "dual" section 112 support for the claims from both disclosures wherein these claim charts which appeared, for the most part, to regurgitate the information that was contained in the correlation chart on a claim-by-claim, limitation-by-limitation, basis.

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- f. In response to these submissions, the Office pointed out that the respective "correlated" citations from the 1981 and 1987 specifications that made up Appellants' charts of alleged "dual" support were quite different and did not meet the required "common subject matter"/"same invention" requirement of section 120. Appellants responded to this by arguing that section 120 does not require that the respective 1981 and 1987 disclosure being relied upon for "dual" support have anything in common other than their ability to *independently* provide some kind of section 112 support for the claims. In taking this position, it appears that Appellants have confused the issue of "support" required by section 112 (as incorporated into section 120) with the issue of "anticipation" that exists under section 102. That is, the fact that Appellants can show that all the limitations of a given claim can be "anticipated" (in a section 102 sense) by different teachings from the respective 1981 and 1987 disclosures does not mean that the section 112 requirement of section 120 has been fulfilled. Appellants must also show that these respective anticipatory 1987 and 1981 disclosures being relied upon for proof of section 120 priority do in fact describe/define the "same invention" and therefor constitute "common subject matter" with respect to that which is claimed; i.e., that the respective descriptions are in fact legal equivalents. This would have been a straight forward exercise had the 1981 parent specification been formally incorporated into the 1987 CIP specification by reference (or at least in some immediately discernible fashion) and had the claims been drafted to derive section 112 support directly from this incorporated 1981 subject matter. But this is not the case, and given the present circumstances, attempting to identify "common subject matter" between specifications has proven to be a most unpleasant and daunting task. Fortunately for the Examiner, "the law" seems "clear" that the burden of proof is Appellants' in that the claims are only entitled to the 1981 effective filing date under section 120 if/when Appellants can show that the claims are directed to "common subject matter" found in both the 1981 and 1987 specifications (i.e., the Examiner is under no obligation to accept mere allegations or to "prove" that Appellants' claims are not entitled to section 120 priority).
- g. From the case law, the steps that Appellants must perform to show that a given claim is entitled to the 1981 effective filing date seem straightforward enough. Namely, it appears that Appellants need only to:
  - i. Identify the respective 1981 and 1987 disclosures that are being relied upon for section 112-1 support of the given claim; and
  - ii. Show/explain how and why the so identified 1981 and 1987 disclosures describe/define "the same invention" and therefor constitute "common subject matter" with respect to that which is claimed; i.e., why the respective 1981 and 1987 CIP descriptions are legal equivalents and, therefor, result in identical 1981 and 1987 CIP claim constructions.

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In the response filed 1/31/2003 in SN 08/487,526, Appellants and Appellants' expert both submit arguments alleging that each of the pending claims can find some kind of dual section 112 "support" in both of the respective the 1981 and the 1987 disclosures and therefor, so they conclude, the claims are entitled to the 1981 effective filing date. However, it is unclear from these arguments what "standard" of proof Appellants' and Appellants' expert have adopted in support of their conclusions. That is, it is unclear whether Appellants and their expert are alleging that the respective 1981 and 1987 disclosures being relied upon for "proof" of priority do in fact describe the "same invention" and therefor constitute "common subject matter" as is required under section 120 or, alternatively, whether Appellants and their expert continue to base their arguments on the premise that "the same invention"/"common subject matter" is not a requirement of section 120 and are therefor continue to improperly base their conclusions of adequate "dual" support based on nothing more than alleged "correlated" 1981 and 1987 subject matter (i.e., based on different 1981 and 1987 subject matter that arguably "anticipates" the claims in a section 102 sense).

Clarification is needed.

h. The point being that that the long standing impasse concerning the section 120 priority issue is not the result of the Examiner's refusal to consider the evidence that Appellants have submitted as "proof" of priority. Rather it is the result of the Examiner's belief and understanding that the evidence being submitted by Appellants misses the mark (given the current fact pattern). As understood by the instant Examiner, merely showing that a claim is "anticipated" by respective teachings from the 1987 CIP and 1981 parent disclosures does not constitute proof that a claim is entitled to the 1981 filing date. To the contrary, the Examiner believes that the respective 1987 and 1981 anticipatory teachings that have been cited by Appellants as proof of section 120 priority seem so diverse in nature that they do not meet, or at least have not been shown to meet, the very

real "same invention"/"common subject matter" requirement of section 120 (i.e., a real requirement of section 120 that Appellants, to this day, continue to refute and dismiss).

The Examiner maintains that there is a very real difference between:

- 1) A claim in a later filed CIP application that recites subject matter that is described in both the CIP and parent specifications; and
- 2) A claim in the later filed CIP application that has been drafted in some "quasi-generic" fashion so that it can be anticipated, arguably, by diverse CIP and parent subject matter from the CIP and parent specifications, respectively.

Namely, the Examiner understands that the former claim recites "common subject matter" and is therefor entitled to priority under section 120, whereas the latter claim does not and is not.

i. The Examiner understands that Appellants' claim to the 1981 priority date needs only be addressed and resolved for those claims which are properly rejected under sections 102 and 103 via intervening prior art. Thus, when Appellants elects to amend the claims to overcome the intervening prior art, the section 120 priority issue becomes moot. However, in light of Appellants' blanket claim to section 120 priority and the fact that these blanket claims were, and still appear to be, founded on an erroneous standard of proof, it is for clarity of record that the Examiner provides corresponding "blanket" responses. It is also the reason why the Examiner has made every attempt to find and properly apply intervening prior art against all of the claims of the present application (i.e., none of the "prior art" of record has been excluded from consideration against the claims of the instant application as a result of Appellants' allegation that ones of their pending claims are entitled to the 1981 effective filing date).

The Appellants allege that the Examiner has misconstrued the term "determining content" within the context of the instant disclosure, stating "that the Examiner has defined the phrase to "simply mean 'detecting a portion of a transmission signal.'" Se pp. 31-33 of the Brief.

The Examiner maintains, however, the broad scope, even within the context of the instant disclosure, certainly does not preclude the applied art of record from reading on the claim terminology. As exemplified by, Zaboklicki, provides a teletext decoder (@ 56) for determining "content" of other media, that is, for detecting the page number content of the teletext media; for detecting the control signal content of the teletext media, for detecting program segment/fragment identifier content of the primary and secondary video/audio components, etc.

Absolutely nothing in the Appellants' disclosure would preclude such a reasonable interpretation given the broad terminology (e.g., "determining content") within the general knowledge and/or usage in the instant art of signal transmission.

Pertaining to the claims rejected under 35 U.S.C. § 102 as being anticipated by the disclosure of the art (e.g., Zaboklicki or Turner or Yoshino) the following should be noted. Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. *RCA Corp. v. Applied Digital Data Systems, Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Associates, Inc. v. Garlock, Inc., 72.1 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

The Examiner, as clearly articulated in the rejection, *supra*, has set forth a one-to-one correspondence with each and every element of the *claimed* invention. More concretely, as recited MPEP§2106:

Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow. . . . The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed. . . . An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible. during the administrative process."). [Emphasis in bold italics added].

Moreover, one must also bear in mind that limitations contained within Appellants' arguments cannot be read into the claims for the purpose of avoiding prior art. *In re Sporck*, 386 F.2d 924, 155 USPQ 687 (CCPA 1968).

As set forth in the MPEP§ 706, "the standard to be applied in all cases is the "preponderance of the evidence" test. In other words, an examiner should reject a claim if, in view of the prior art and evidence of record, it is more likely than not that the claim is unpatentable." Clearly, the Examiner has established that one of ordinary skill in the art would *reasonably* construe the one-to-one correspondence with each and every element of the *claimed* invention, in the manner set forth in the rejection, *supra*, by at

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least the preponderance of the evidence. The Appellants' arguments have fallen well

short of rebutting the Examiner's prima facie case of anticipation.

Moreover after considering all the Appellants' arguments, the Examiner maintains

the rejection for the reasons articulated in the rejection, supra, based on the disclosed art,

the knowledge of one having ordinary skill in the art at the time of the invention, and the

suggestions of the references themselves, (both implicit and explicit) and the requisite

that the Examiner is required only to provide a showing that it is the preponderance of the

evidence that is required to support a rejection under the patent statues during ex parte

examination.

As been widely held in patent law, exemplified by In re Tanczyn, 44 CCPA 704,

766, 241 F. 2d 731, 112 USPQ 483, 485, (CCPA 1957) "[i]t has been repeatedly held that

a patent should not be granted for an Applicant's discovery of a result which would flow

naturally from the teachings of the prior art."

(11) Related Proceeding(s) Appendix

See Section (2), supra.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

William J. Klimowicz

WILLIAM KLINOWICZ PRIMARY EXAMINER

Conferees:

DAVID OMETZ SUPERVISORY PATENT EXAMINER James J. Groody Supervisory Patent Examiner Art Unit 262 2016